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S. P. Lake

Fraser's Tree Book

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JUL 21 1920
U. S. Department of Agriculture

SAMUEL FRASER
GENESEO, NEW YORK

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Buy Your Trees From The Grower

READ CAREFULLY

WE SELL TREES—FRESH-DUG TREES. We also sell fruit, but this catalog is for the purpose of selling trees; the illustrations in it are of trees. We want you to know how the different trees grow. They have individuality as marked as the fruit they bear. You need to know this in order to handle the trees successfully. We have, therefore, at considerable expense, grown and photographed at different ages, various fruit trees, and we intend to keep this up and post you from year to year as to the various happenings in our orchards. We can save you a lot of money. Few men realize how a tree is going to look six, ten, twenty or forty years ahead, and how to secure the best form for business. We can show you what we know.

ORDER EARLY. We are apt to be sold out if you leave the ordering until you need the trees to plant. Write clearly the number, size, age and price of each article required.

NAME AND ADDRESS. Write plainly on the Order Sheet in the catalog. Give post office, county and state, and name of nearest express office.

SHIPMENTS BY FREIGHT. If shipment is to go by freight, give railroad desired and route.

EXPRESS. All small orders are best sent by express.

PACKING. Packing is free, and with our careful methods stock will reach you in good condition.

RATES. Five or more take 10 rate; 50 or more take 100 rate; 400 or more take 1,000 rate.

SUBSTITUTION. We do not substitute. If sold out, we tell you. If you desire us to substitute, please mention it.

SHIPPING SEASONS. Fall planting is desirable in many cases. Fall shipments begin about October 25 and continue until frost. Spring shipments begin about April 1 and last until May.

INSECTS AND DISEASES. We have no San José scale. Certificate of Inspection from the New York State Department of Agriculture accompanies each shipment.

TERMS AND CONDITIONS OF SALE

All quotations are for immediate acceptance subject to stock being unsold. All agreements and contracts are made subject to crop losses through unavoidable causes.

GUARANTEE. We guarantee each tree to be in perfectly healthy condition, up to grade, and first-class when leaving our hands. All goods are sold f. o. b. Geneseo, and travel at the risk of the purchaser; but we stand ready to rectify any error which may occur on our part. All claims for errors must be made within five days after receipt of goods.

RESPONSIBILITY. We cannot assume any responsibility for failure arising from defective planting, adverse weather conditions, or faulty cultivation. In other words, we sell our trees at the lowest price consistent with quality, and will not replace, free, those which fail to grow. We exercise the greatest care to have all trees true to name, and will replace free or refund the money paid should any accidentally prove untrue to label; but, at the prices quoted in this catalog, it is mutually agreed between the purchaser and ourselves that our guarantee shall not render us liable for a greater sum than that originally paid for such trees as prove untrue to name.

RESERVING ORDERS. When purchasers desire stock reserved for several weeks after shipping opens, cash must accompany the order.

TERMS OF PAYMENT. Cash with order or satisfactory reference before shipment. C. O. D. shipments and shipments with sight draft attached will be made when 25 per cent of the amount is remitted before shipment.

REMITTANCES. Post-office or express money orders, or checks on New York banks. Make all remittances payable to Samuel Fraser.

Diamond Plum

Montmorency Sour
Cherry, Mazzard
Root

Windsor Sweet Cherry
Mazzard Root

Rhode Island
Greening Apple

The roots you never see after the tree is in the ground. Strong, vigorous, clean roots are found on Fraser's trees. All two years old.

Some Things You Need to Know Before You Plant Your Apple Orchard

First, secure trees which are grown right and are true to name. We can meet both of these requirements.

Second, know where the trees were grown.

Our Nurseries are located at Geneseo, N. Y., in the heart of the famous Genesee Valley. The land has never grown trees before. It is free from disease. The soil is the Dunkirk loam, one of the richest of the general-purpose soils in western New York, and one of the best adapted for the purpose of growing trees. We thoroughly under-drain our land and prepare it for the crop. Our aim is to grow a tree for the fruit-grower. We went into the business to grow trees for our own planting, and have gradually expanded from this point. We know what the fruit-grower needs, and are prepared to furnish it. At the present time we have probably a million trees in the Nurseries.

The Roots of the Tree. One does not see the roots after the tree is planted—the more reason for knowing all about them beforehand. We use French-grown stock for the reason that we find, in the case of Apples in particular, that the roots are much cleaner and give better results in this locality than native-grown. They cost more than western-grown seedlings, but we believe they are a much better proposition for the fruit-grower. We buy nothing but the largest-size, one-year-old French Crab Apple seedlings. Crown-gall, hairy-root and other root troubles are much less frequent on the French Crab stock than on the western-grown.

The Propagation of Trees. We propagate Apples by budding and grafting. Everything else is budded—that is, Pears, Cherries, Plums, Peaches, etc. For some of the north central states, as Wisconsin and Minnesota, it is advisable to use small piece-root grafts, and plant the young tree deep in the nursery row, so that the graft will make roots of its own. The French Crab root, under such conditions, is not sufficiently hardy. Such varieties as Wealthy are more hardy on their own roots. For the eastern states we are satisfied that buds or whole-root grafts, according to variety, are the most acceptable.

The Source of the Buds and Grafts. There is evidence of a large amount of variation in the bearing power of different trees of the same variety. This may be as high as 500 per cent. In other words, two trees, growing alongside of each other, may vary in their power to bear Apples to the extent that one may average one barrel per year and its neighbor five barrels. Whether this can be transmitted or not is a question which will take a number of years to settle. We are going on the assumption that if we can secure our propagating wood from individual trees which produce large crops, and at the same time have vigor, that it will be to the benefit of our customers. By taking our wood from bearing trees in the first instance, we are assured that the varieties are true to name. We cannot always get a sufficient supply in this manner, and are forced to take some of our buds from our nursery rows. This is most common with the varieties which are not commercial in our orchards. In other instances, we have planted the trees in our own orchards, and are propagating from the young trees which have been developed from the most promising individuals. The securing of buds for our trees in this way is a very large item of expense, but we considered it for the benefit of our customers to make this additional outlay. It is customary to take the buds from the nursery row without very much question, but there is always the danger of a mixture taking place, and for that reason we return to the bearing trees every few years at the latest.

SELECTION OF VARIETIES

What variety shall I plant? If this important question is answered properly the future orchardist is on the way to success. If answered incorrectly, the mistake can be remedied only by the expenditure of considerable time and money. Several factors enter into the answer to this question, for varieties are affected decidedly by the methods of culture given, type of soil upon which they are planted, and, perhaps, most important of all, the climatic conditions. This factor of climate is one which the grower cannot affect materially. He must, therefore, select varieties which are adapted to his conditions.

The varieties of Apples grown in New England are not those of New Jersey, neither are those found in Wisconsin adapted to Missouri. The best Baldwins, for instance, are found in southern New England, New York, southern Ontario and southern Michigan. The reason for this variety failing when carried farther south is that the summer heat is too great for it, and it suffers in flavor and keeping quality. It is not well adapted to the country west of Lake Michigan on account of the severity of the winters; likewise, when carried into northern Vermont it is an absolute failure. It cannot be grown at an elevation greater than 1,200 feet with profit in the state of Massachusetts, so that we have the area adapted to the Baldwin variety fairly well defined. In a similar way there are different sections which are peculiarly adapted to other specific varieties. The Wealthy Apple does well over nearly all of the Baldwin belt, and in considerable portions of Wisconsin, Minnesota and northern Iowa, being able to endure their winters and low temperature. The Newtown Pippin thrives in the lower Hudson Valley, in certain sections of Virginia, and in the Hood River Valley in Oregon, and in these locations we find on examination that the conditions of summer temperature are practically the same. With these facts in mind, Dr. J. K. Shaw, of the Massachusetts Agricultural College, has grouped the different varieties according to the isotherm to which they are adapted, and these are found in the report of the Massachusetts Agricultural Experiment Station, No. 22, Part 1, page 194, and No. 23, Part 1, page 177, to which the reader is referred for a more extended discussion.

Elevation is a Factor. For every 200 feet elevation we shall probably find a noticeable difference in the keeping quality of a variety. Slope is equally important. A northern slope will result in the fruit maturing later than a southern slope. Soil conditions are equally important. A light soil will hasten maturity, while a heavy one will delay it. All these factors will have to be considered; but, taking the question in a broad sense, we may say that such standard varieties as the Rhode Island Greening

Distribution of Apple Varieties in Eastern North America

A Somewhat Arbitrary Outline of the Districts for Certain Varieties of Apples

As a brief statement, we may say that exclusive of Nova Scotia, which falls in line closely with Group 2, we find in

GROUP 1.—Fameuse or Snow as the typical Apple, with Oldenburg, Bismarck, Yellow Transparent, Alexander, growing well.

GROUP 2.—The Baldwin leads, with Rhode Island Greening, Northern Spy, Tompkins Co. King, McIntosh Red, etc.

GROUP 3.—The climate is too severe for Baldwin, and Wealthy may be regarded as typical, with Oldenburg, etc., desirable.

GROUP 4.—Is the Rome Beauty and Newtown Pippin belt, with such varieties as Smith's Cider, etc.

GROUP 5.—Is the largest in area and leads in the production of Ben Davis, Jonathan, York Imperial, Winesap, Grimes Golden, etc.

GROUP 6.—Is the southern limit of Apple production with such varieties as Yates, Horse, Shockley, etc.

and the Baldwin will thrive under somewhat similar climatic conditions. However, the Greening would be better planted on the heavier clay loam and the Baldwin on the lighter loam or sandy loam under similar climatic conditions. This factor of soil is as important as that of climate, and must be studied in even greater detail. Hubbardston Nonsuch, for instance, might mature well on light, sandy land, well supplied with moisture even north of its general location. In addition to the factor of soil, climate, exposure and elevation, a knowledge of the best cultural methods for the variety is necessary. **In brief:** Plant only those varieties which are known to succeed under your conditions. New varieties are unknowns.

THE GRADES OF TREES

Apple trees are graded according to the diameter of the trunk, 2 inches above the bud, and their height. The diameter is spoken of as the caliper. For instance, XXX trees are supposed to be 11-16 inches in caliper and 5 feet and up in height; XX are $\frac{3}{8}$ inch in caliper and 4 to 5 feet in height; X are $\frac{1}{2}$ inch in caliper and 3 to 4 feet in height. One-year-old trees are sold by height only, $3\frac{1}{2}$ feet being a good height for some varieties; usually they are sold $3\frac{1}{2}$ to 5 feet. The reason for the lower size being given is that some varieties are not so strong growers as others; for instance, Williams Red is a very poor grower the first year or two in the nursery, and will not make nearly so large a tree as Rhode Island Greening, Stayman or Stark; in other words, a $\frac{3}{4}$ -inch Stark tree is probably just as common as a $\frac{5}{8}$ -inch Williams Red; both would be first-class of the variety. In judging trees, therefore, the purchaser should know what the variety is capable of doing during the two years it is in the nursery row. We invite inspection, and shall be glad to show our records and methods to all.

APPEARANCE OF THE TREE

Most purchasers desire a straight tree. Some varieties grow much straighter than others. Rhode Island Greening is apt to be crooked in the trunk. This is really of no great moment. The tree will bear just as good Apples if it has a little curve in the trunk, and the curve will not amount to anything when the tree has grown a few years; it will not be apparent, but as conditions now are it is necessary to discard such trees.

CARE OF THE TREES ON ARRIVAL

If not ready to plant on arrival, unpack but do not leave the roots exposed to the cold or air; dig a trench, and heel-in by carefully covering the roots with earth, and give a copious watering. Trees thus treated can remain in the trenches until ready for planting in the orchard. If frozen when received, do not open the boxes, but place them in a cellar or some cool, dark room that is free from frost, and let them remain until all the frost is drawn out. If no cellar or frost-proof room is available, bury the box in sawdust or soil until thawed. The point is to get the frost entirely out without sudden exposure of the stock to heat, light or air. Even if frozen solid, the stock will not be injured if handled in this manner. If partially dried from long exposure, bury entirely in the ground, or place in water from twelve to twenty-four hours.

PRUNING

We are convinced that too much pruning is frequently given a tree before planting. There is no necessity to take off any of the roots, except an injured portion, and none of the top should be removed save limbs which are not needed. Under no conditions would we cut back any of the limbs which are to be left.

Our idea in starting the head of an Apple tree is to start the lowest limbs about 18 inches from the ground, and bring out each limb in the form of a whorl with about 10- to 15-inch intervals; that is, the first limb at 18 inches from the ground and the next

We employ no agents. This catalog is our salesman. If you have any problems, we shall be glad to try to help you solve them, or tell you where to go to secure the help you need.

A Bartlett Pear tree in its sixth year. Had some pruning annually for three seasons and then allowed to grow for two years to show the increase in number of twigs and few fruit-buds.

A Bartlett Pear tree which has not been pruned since it was set. Note the few branches all loaded with fruit-spurs. No need to prune the Bartlett; the more we prune the more we must.

one at 2 feet 3 inches; the next one 12 inches higher, and the next 12 inches higher still, leaving the center in, in the case of those varieties which are apt to tear apart, as Wealthy or Rhode Island Greening (which is apt to come to the ground), or taking it out in the case of varieties which are apt to grow with a closed head, as Sutton, Northern Spy or Baldwin. There should be three or four limbs and a leader. The type of tree will depend upon the ideas of the individual and upon the variety, but under no conditions would we advise the cutting back of the limbs which are left, because it only results in the delaying of growth in the season they are planted, also in delay in fruiting. If a variety is started in the manner outlined, and not pruned or very little pruning be given, merely to keep the shape, a variety such as Baldwin may be made to produce crops of one bushel per tree in five or six years after planting, and varieties such as Rhode Island Greening may be brought to bear in three or four years after planting. Pruning to open the tree may be given after the tree has borne a few crops, and it is apparent that pruning is necessary.

Two rules to follow in pruning:

1. The tree does not need pruning so long as the sun can reach all parts of the tree some time of the day, unless the pruning is given for some specific purpose, as removing peach limbs to reduce the work of thinning the crop.

2. Always begin to prune at the top of the tree, saving the lower limbs. A reason: It costs a cent per barrel extra to pick the crop for each foot the picker has to ascend, up to 20 feet, that is, 20 feet high, 20 cts. per barrel, and when we go 35 feet high the cost is greater.

We desire to impress upon all planters the importance of selecting well-grown trees of desirable varieties, propagated from vigorous individuals; securing good, well-drained soil and site; the necessity for proper planting, feeding, spraying and pruning of the trees; careful grading and packing of the fruit. No phase of the work can be omitted. The fruit-grower must be well supplied with capital, be an optimist, be thorough and a specialist.

PLANTING

One of the most important things, and practically the only important thing, in planting is that the ground be well pounded around the roots and the trees planted deep enough. Trees should be planted 1 or 2 inches deeper than they stood in the nursery row—no more. The land should be well fitted and thoroughly under-drained before planting. Under-drainage is perhaps very much more important than blowing out the hole with dynamite.

Fall planting should be practiced wherever it can be with success. The work is got out of the way, and the trees are going to grow earlier the following spring and, in many cases, can make some growth of root the same fall.

It is our experience that it is not wise to plant one-year-old trees in the fall, because, frequently, they are not sufficiently mature in fall to transplant, but do well the following spring. A two-year-old tree is much safer to use for fall planting and for planting in sod, or where the trees are to rustle for themselves to some extent.

Planting Distances and Methods

Trees can be planted in the square, diamond or hexagonal methods. Personally, we prefer the square and, in New York, for such varieties as Baldwin and Rhode Island Greening on good land, 44 to 50 feet apart each way is not too much. To utilize the land economically we frequently inter-plant with other trees. Some use Peaches, but we prefer Apples. With our present methods we would not hesitate to plant Baldwin or Rhode Island Greening in solid blocks, using them as permanent and filler trees, but for those desiring fillers of other varieties the following list is given:

Williams Red, Yellow Transparent, Alexander, Ben Davis, Oldenburg, Wealthy, Jonathan, Boiken, Hubbardston Nonsuch, Rome, Wagener, Banana, Twenty Ounce, Stark. Some suggest McIntosh Red; but, on account of its spreading habit on good land, we would as soon plant Rhode Island Greening. The habit of growth of these trees up to six years after planting is shown on the following pages.

Distances for Planting

Apples, Standard 30 to 50 ft.	Cherries, Sweet 18 to 25 ft.	Currants 4 to 7 ft.
Apples, Dwarf 10 to 16 ft.	Cherries, Sour 18 to 25 ft.	Gooseberries 4 by 6 ft.
Pears, Standard 18 to 25 ft.	Plums 16 to 20 ft.	Raspberries, Red 3 by 6 ft.
Pears, Dwarf 10 to 14 ft.	Quinces 10 to 15 ft.	Raspberries, Black 3 by 6 ft.
Peaches 16 to 22 ft.	Grapes 8 to 10 ft.	Blackberries 5 by 7 ft.

Number of Trees or Plants on an Acre

3 feet each way 4,840	10 feet each way 438	20 feet each way 110
4 " " " 2,723	12 " " " 305	25 " " " 70
5 " " " 1,742	15 " " " 194	30 " " " 48
6 " " " 1,210	16 " " " 170	35 " " " 40
8 " " " 680	18 " " " 135	40 " " " 28

Cultivation and Fertilizers

In the nursery the trees have received thorough cultivation and a certain amount of shade from each other. When planted, the growing of a corn crop the first year between the trees is good practice in localities where there is considerable sunshine, and placing a shingle in the ground on the southeast side of the tree, or some other protection, will prevent considerable loss of trees from sun-scald in the winter. Low heading tends to protect the trunk from sun-scald, but the tree may need protection for a few years.

Sod mulch properly carried out is a profitable method of growing Apple trees under some conditions, under others tillage may be preferable. Under our conditions on Dunkirk loam and clay loam soils in western New York, we practice cultivation and the growing of tilled inter-crops—corn, potatoes and beans, between the trees for three or four years. We manure the trees every second year, and find that basic slag, at the rate of 500 to 800 pounds to the acre, and nitrate of soda at the rate of one-half pound for a young tree the first year, to two pounds per tree at six years, are profitable.

In applying fertilizers after the first year, we spread them over an area equal to three times the diameter of the tree. The bulk of the feeding roots are outside the spread of the limbs, and manure and fertilizers should be applied in this area rather than under the tree. Five years after planting the roots of Apple trees, planted 25 feet apart, have met.

250,000 one-year-old Apple trees in our Nursery. Photographed Oct. 28, 1913. Variety, McIntosh Red

APPLES

One- and two-year-old buds and two-year and three-year root-grafts. We never grew a better lot of Apple trees than we now have to offer. Come to see them.

	Each	Per 10	100
XXX grade.....	\$0 45	\$3 50	\$20 00
XX grade.....	40	3 00	15 00
X grade.....	35	2 50	10 00
McIntosh Red, English Codling, Opalescent and Ohio White Pippin are 5c per tree higher			
Special quotation on thousand lots

Yellow Transparent tree five years planted and bearing a small crop. We prune at this time to open the tree, taking care not to remove too much wood, because this would merely encourage the production of suckers.

SUMMER APPLES

Red Astrachan. A beautiful Apple of medium size; yellowish underground, with light and dark red coloring; handsome in appearance; vigorous grower, hardy; fruit apt to be small; excellent cooking Apple; must be shipped on ice. July to September.

Williams Red. Beautiful, dark red, dessert Apple; very tender, easily bruised; must be handled in baskets; requires good land and needs to be well fed. Well adapted to local market; early bearer; good seller. The tree is not a strong grower, it is spreading in habit and the center may be left in. August and September.

Yellow Transparent. A popular, well-known Russian variety. Color, when ripe, pale waxy yellow; very tender, must be handled carefully; subacid, crisp, fragrant. Tree an upright grower, hardy, fairly well adapted to light soil; must be carefully watched against fire-blight; very early bearer; well adapted to local market. The young tree is apt to grow dense, but owing to its regular bearing it pulls open and considerable thinning of the fruit or of limbs is necessary to maintain the size of the fruit. July to September.

AUTUMN APPLES

Alexander. This magnificent, large, red Apple is of comparatively poor quality, and yet there is probably no Apple which is a better money-maker when it is planted on soils to which it is adapted. The center may be left in the tree for as it matures it will spread, if given room, and not go high. If fire-blight is very prevalent it will be on this variety, and it is easier to handle on trees with an open head than when a leader is left in. The fruit should be marketed quickly, or put into storage as soon as picked, otherwise it deteriorates rapidly. Our trees are propagated from an orchard in western New York which bore \$1,600 worth of Apples per acre. September and October.

Beitigheimer (Red Beitigheimer). The fruit is remarkable for its great size and beauty. It is a good cooking Apple, but coarse and subacid. The fruit drops badly. The tree is a vigorous grower, bears early and is an annual cropper. September and October.

English Codling. This handsome large green Apple is much sought after for culinary use on the New York market the two last weeks of August and in early September. It is grown in Monmouth County, N. J. to some extent and is one of the most profitable Apples in the orchards of that section. The tree is a strong grower, hardy and a regular and early bearer, with a heavy crop in alternate years. Our buds were secured from some of the best trees in Monmouth County. August and September.

Fall Pippin. We have secured an excellent strain of this old favorite. It is a large, yellowish green Apple, with tender flesh, rich and very good in quality. The tree is a strong grower, hardy and long-lived. It is well adapted to the home orchard, or for such districts as the Hudson River Valley, from which it can be readily put into the market. It is exported to a limited extent. September to January.

Fameuse, or Snow. This handsome, deep red fruit, with its white flesh, is well known and has a good reputation. It is an excellent dessert variety; is very hardy. We bud from one of the best strains of the black-red type, grown in Vermont.

Gravenstein. Fruit is large; light to deep red over yellow ground; tender, crisp and aromatic, and of excellent flavor. Tree is a strong grower and regular bearer, but is somewhat tardy in coming into bearing.

McIntosh Red (Doucain) 3 years planted. This tree was not pruned other than to remove one or two limbs at the time of planting. Note the tree is not thick; one can see through it and it needs little pruning.

The fruit is apt to drop. The wood used for propagation of our strain was secured from one of the best orchards in New Jersey, which has turned off a yield of \$800.00 per acre. September to November.

Jeffries. This is an excellent variety for home use. The tree is a moderate grower, hardy, comes into bearing moderately early. The fruit is medium; yellow, splashed with red; tender, excellent flesh. Ripens unevenly. September and October.

Maiden Blush. Medium size, lemon-yellow with crimson cheek; of excellent quality; well known. Tree is a strong grower, free from blight and where well adapted is an annual or biennial and prolific bearer. We have strains of this variety from one of the best and most productive orchards in New York, taking them from several of the best trees. These trees have made records and are well known. September to December.

McIntosh Red. This seedling of Fameuse is much larger than its parent, and has a bright red skin, with white flesh lightly tinted with pink; very tender and delicious and has a delightful aroma. The trees we have are budded from some of the best strains in the Champlain Valley, Vermont, where this Apple grows to perfection. We have at the present

AUTUMN APPLES, continued

time all our stock budded from two or three selected individual trees. The tree is apt to become flat-topped when it begins to bear. Leaving the central leader in will tend to correct this and make a more profitable tree. September to January.

Oldenburg (Duchess of Oldenburg). A well-known Russian variety; skin red-striped on white; excellent for cooking. Tree hardy, vigorous, early and prolific bearer; it is usually planted as a filler and can be planted in a solid block. One of the best commercial Apples of its season. August and September.

Twenty Ounce. The tree is a moderate grower; is subject to canker and collar-rot, but in spite of these defects is highly esteemed in western New York for commercial planting. Fruit is large; green, with red stripes; hangs well and stands shipping well and usually brings good prices. We have the Collamer Twenty Ounce, as this is regarded as being higher-colored than the ordinary strain. For those desiring them, we are top-working, in the nursery rows, a block of Tolman Sweet to this variety. We believe Tolman to be one of the best trunks for this variety. September to December.

Wealthy. This beautiful, moderate-sized, brilliant red Apple is of fine quality, one of the best of its season; it is a relatively good keeper in storage, and may be held until near Christmas, and, owing to the hardiness of the tree, its adaptability to cold climates, and early bearing habits, it can be profitably planted as a filler. In western New York there are old unpruned

A Twenty-Ounce Apple. Tree two years old when planted in April, 1909. Photograph taken October 28, 1913. Height 10 feet, spread of branches 7 feet. Tree an erect grower.

trees which are bearing handsome crops of relatively good-sized fruit, although as it increases in age the tree should be pruned vigorously in order that the fruit may be of large size. We believe it wise to leave the leader in for this variety and space the limbs a good distance apart. September to December.

Wolf River. This variety much resembles its supposed parent Alexander, but grows larger. It is replacing this variety in the western states. The fruit is large; red-splashed on green; flesh yellow, somewhat coarse, tender, juicy, subacid, fair to good. The fruit needs careful handling and prompt shipment on ice. The tree is a strong, spreading grower, biennial bearer, hardy and a good grower. September to December.

A Baldwin tree planted as a two-year-old in May, 1907. Photograph taken October 28, 1913. Notice the diameter is equal to the height.

Every year there is a strong demand for more fruit, and the present supply does not anywhere meet the demand. And with the cry for more fruit there is an equally insistent one for better fruit, and the wise grower is he who studies his market.

WINTER APPLES

Baldwin. This variety is peculiarly adapted to New York, parts of New England, Michigan, northern Pennsylvania, Ohio and Ontario. There is little need to fear an over-production of this excellent Apple, and fruit-growers suitably located in the area mentioned may safely plant it. The fruit is large, bright red; firm texture; excellent shipper. Europe will take all we can grow. It has usually been stated that it is slow in coming into bearing, but we have trees bearing a bushel five years after planting, and every tree in the orchard bearing some fruit. As high as half a barrel of fruit has been produced six years after planting. The tree is a strong grower, long-lived and vigorous. If given room it will develop a spread equal to its height. If located where it is apt to be deficient in color, an open-centered tree is desirable, but on sandy land the leader may be left in. November to May or later in storage.

Olympia Baldwin. Believed to be a better-colored type. We have propagated a number of trees from this strain; but are informed that in New York the fruit does not differ in any manner from the type.

Ben Davis. The most popular Apple grown south of the Baldwin area. The area suitable for this variety is much greater than that available for the Baldwin. It can be grown in the more favorable parts of New York with profit. When well grown the fruit is large, handsome, red; the skin is thick, does not show bruises, and makes a good appearance at its destination. The quality is but moderate, but the Apple is good for culinary use, and it should not be put on the market until January to June. Ben Davis has a place because there are still so many markets which cannot be reached by refrigerator cars, and to such Ben Davis can be sent with safety. The tree should be allowed to bear early, when it will open up and once it has developed shape the necessary pruning may be given to insure an open tree and secure good-colored fruit. January to June.

Boiken. This old German variety produces fruit beautifully blushed on a green ground; crisp, subacid; good quality; generally an excellent keeper. Tree is hardy, healthy; foliage vigorous; bears early and is an annual bearer. We have planted it as a filler. November to May, in storage.

One of our Baldwins (standard) 5 years planted, bearing $1\frac{1}{2}$ bushels of fine fruit. Note how open the tree is; light can be seen through all parts of it, insuring the presence of sunlight, which is necessary to give color to the fruit.

One of our 40-year-old Baldwins bearing 12 barrels. This tree was in a neglected orchard 6 years ago, and one could ride horseback under its limbs. By judicious pruning, opening the tree from the top and letting light into the lower limbs it has gradually come down so that considerable fruit is picked from the ground. The limbs swing back before spring. The lesson is that the bearing tree is apt to be more open than one would expect.

WINTER APPLES, continued

Canada Red (Steele's Red Winter). One of the best dessert Apples of its season, attractive in form and size, handsome red, superior quality. An excellent box Apple. When well grown is an annual bearer. With us the tree is not a strong grower. It will stand feeding and may be planted close. It is reputed to be slow in coming into bearing, but with us some of the trees had a nice crop the sixth year. November to March.

Delicious. The fruit is large, conical, ribbed; light yellow overspread with red; flesh yellowish, firm, a little coarse, tender, juicy, subacid and good. The tree is large, vigorous and productive. Hedrick states: "In New York the fruit is subject to water-core, breaking down at the core, and to scab." December to February.

Golden Russet. The fruit is sprightly subacid, fine-grained and rich in flavor. The tree is hardy, a regular bearer, frequently biennial, but sometimes annual. December to April.

Grimes Golden. This beautiful, rich golden yellow Apple is excellent for dessert and culinary use. The flesh is yellow, firm, tender, crisp, rich, sprightly and very good. November to January. The tree is moderately vigorous, spreading, rather dense and inclined to droop, and there is complaint of collar-rot. It grows well in the central Apple-growing region with York Imperial. When grown in the north, the percentage of culls is too high, but in its proper location it is an annual and prolific bearer. It is one of the best known of all yellow Apples and always commands high prices.

HAVE YOUR TREES GROWN TO ORDER

If you have or know of any desirable tree, bush or shrub, with a record for productivity or some other important factor and desire plants propagated from same we will contract to do it. If you have a special strain of apple or pear and want to plant more, we can grow it for you. You furnish the buds or scions and we will guarantee to deliver you the trees therefrom at a reasonable price.

A Hubbardston Nonsuch tree planted in May, 1907, top-worked in 1908. Photograph made October 28, 1913. The height and diameter are about equal—11 feet.

WINTER APPLES, continued

Hubbardston Nonsuch (American Blush). This large red Apple is an early bearer, in fact one of the earliest bearers we have, and can be planted with profit as a filler. It is best adapted to relatively light soils in the New England and New York districts. Our strain is one of the best known in western New York, from trees 60 years old, which are still bearing regular crops of handsome fruit. October to January.

Jonathan. This handsome red Apple, of excellent quality and fine, high flavor, is well known. The tree is a relatively early bearer, long-lived, but needs a pollenizer in some sections. It is often planted as a filler for Newtown Pippin and Spitzenburg. November to January.

Northern Spy. This large, bright red Apple is well known, being regarded as the highest quality grown; rugged, hardy, although somewhat tardy in coming into bearing, but when given little pruning and planted on soils to which it is adapted, it may be made to produce a barrel per tree seven or eight years after planting. In many locations it must be trained with an open head in order to get color. It is safest to grow it without a leader, but no limb should be less than 12 inches from the one below it, if the tree is to be safe from splitting. November to March.

Newtown Pippin. This high-quality Apple has a rather tough skin, grass-

green at harvest time, but turning yellow later. The flesh is yellowish, firm, crisp, tender, juicy, subacid and excellent flavor. Tree a moderate grower, spreading or roundish and rather dense in shape. It is tardy in coming into bearing, but on Doucin stock we have had it bear three years after planting. Our buds were secured from some of the best trees of J. Clarke & Sons, Milton, N. Y., whose trees were propagated from the old Pell orchard. We also have buds from H. D. Lewis of Annandale, N. Y., these being two of the best growers in the state. Season February to May.

Ohio White Pippin. The fruit is medium to large, often very large, pale yellow or light green, with firm, crisp, juicy, tender, good-quality flesh; excellent for fancy trade. It is highly esteemed in parts of Ohio and the middle West, and grows well in New Jersey and parts of New York. This handsome

A Northern Spy tree, with the center left in to secure distribution of limbs. The diameter is less than the height. The tree was planted in May, 1907, and grafted in 1908. Photographed Oct., 1913.

A block of two-year-old Rhode Island Greening trees photographed in my nursery October 28, 1913. Trees are from 7 to 8 feet tall. Notice the strong root-growth.

WINTER APPLES. continued

Apple is rapidly gaining in favor with those who have been able to secure it. Mr. John H. Barclay, of Cranberry, N. J., who furnished me with buds, states that with him it is a more profitable Apple than Stayman's Winesap or Rome Beauty. The tree is a good grower of spreading habit and a regular bearer. November to March.

Opalescent. This large, brilliant red Apple is of good quality. The skin is tough, glossy and takes a brilliant polish. The flesh is yellowish, firm, crisp, tender, juicy, subacid and very good. The tree is vigorous, roundish, open and productive. Hedrick states: "It is one of the most attractive Apples grown." From Maine we have a report that "it is a hardy tree, an early and regular bearer; trees eight years planted have borne three successive crops the past three years." Season November to January.

Rhode Island Greening. Our strain of this excellent variety is a green fruit with practically no blush and is not apt to become yellow. The market calls for a green Greening. Those which are yellow

indicate that the variety has been planted too far south, or else the strain is relatively poor. It is excellent for cooking purposes or for dessert. The tree is an early bearer and in many cases can be planted with profit as a filler; it is apt to come to the ground (see outside back cover), and for that reason the tree may be headed somewhat higher than some others, although we are making very little difference in this respect. We have confidence in stating that we have one of the best strains of this variety on the market. The trees are well grown and are strong growers and early bearers. November to March.

Rome Beauty. This handsome red Apple is being extensively planted as a filler owing to its early-bearing habit; the fruit is an excellent keeper, and is in the market after many others have gone. The fruit hangs well, and it is excellent for exposed situations. We have the genuine Rome Beauty, and one of our strains is of particularly high color. This variety may be grown with or without a leader. It can be left to secure color, it hangs so well. November to May.

Spitzenburg (Esopus). Medium-sized fruit, bright red, firm, crisp, subacid, highly flavored; is regarded as the standard of excellence. Our strain is propagated from a tree of good age, which is bearing high-grade fruit in Geneseo. The tree is an open, willowy grower and the leader may be left in. November to June in storage.

A Rhode Island Greening tree in its fourth season. Nearly 10 feet tall and about 7 feet in diameter. A leader left in. First branches 15 inches above the ground.

WINTER APPLES, continued

Stark. The tree is hardy, healthy and thrifty; a reliable cropper and productive. The fruit is smooth and uniform, keeping well; when well grown is red, but is often dull, showing little red; quality moderate. Succeeds where Baldwin does well and in regions outside of this area.

Stayman's Winesap. This high-quality Apple is well adapted to the southern Apple-growing section; dark, rich red, striped; flesh firm, fine-grained, juicy, very tender and of excellent quality. December to April.

Sutton (Sutton Beauty, or Morris Red). On account of its beautiful color and size Sutton is an excellent dessert Apple, well suited for the fancy trade. Fruit medium to large, attractive, red, with firm, fine-grained, crisp, juicy flesh, mild subacid, good flavor. The fruit hangs well to the tree. The tree is upright, spreading, becoming roundish and dense, with vigorous, dark green foliage. Owing to the dense habit of its growth the limbs need to be spaced far apart on the trunk, and the open-center tree is desirable. It will probably do well where Hubbardston Nonsuch and Baldwin attain high color. November to February.

Tompkins County King. This large, handsome, red Apple is of excellent quality

A half-bushel basket of Rome Beauty Apples—No. 1 fruit.

and commands a relatively high price, but it has not proved remunerative to many growers. The tree is not hardy, frequently apt to go with collar-rot and canker; the wood is relatively brittle; it may be planted in certain sections where the soil is gravelly loam to which the variety is well adapted. To try to overcome the collar-rot as much as possible, we have budded some of this variety on French Crab stock about 6 inches to 8 inches higher than usual; this will tend to keep the King trunk from contact with the soil. We have also top-worked the King on Tolman Sweet stock, in the nursery. The tree is such a sprawling grower, and has such long shoots, that it may be encouraged to go upward and the leader left in. Season, October to January.

Tolman Sweet. This is one of the best, sweet cooking Apples we have; large; yellow, with a soft blush and is comparatively attractive. Tree is an excellent grower, very hardy, comes into bearing comparatively early, and to those wishing a trunk to top-work on there is probably no variety which is more valuable than this; in our judgment it is much better than Northern Spy or Ben Davis, for more varieties will unite well with it and grow well than can be top-worked with profit on Northern Spy. Those wishing to top-work

The spreading habit of the Rhode Island Greening develops rapidly as the tree begins to bear in the fifth or sixth year. This was a Golden Beauty Crab, planted in May 1907, grafted to Rhode Island Greening in April, 1908. The height is 11 feet, the diameter is 14 feet.

A Spitzenburg tree budded on Doucin. Planted as a two-year-old in May, 1909. Photographed October 28, 1913.

WINTER APPLES, continued

Tompkins County King or Twenty Ounce will find this a very much better stock than Northern Spy, for it has been our experience that Twenty Ounce does not unite well with Northern Spy. November to January.

Wagener. This handsome red Apple, somewhat resembling Northern Spy, is

This Wagener tree looks thick but will begin to spread as soon as it comes into bearing. The tree bears early, and the fruit must be thinned to get fine specimens.

well adapted to planting as a filler; the tree grows relatively compact and does not spread, and, on account of its early bearing does not make very large size. It is usually somewhat short-lived and should not be planted for any other purpose than as a filler. The tree grows upright while young but if given room it begins to spread out as it comes into bearing and does not make a tall tree. October to January.

Improved Wagener. We have the Improved Wagener but are informed that this is not different from the general type.

Winter Banana. This is a large, pale yellow Apple with a pink blush, and is attractive and highly esteemed by those looking for a relatively soft Apple. It is one of the earliest bearers we know, and for the locality to which it is adapted is an excellent Apple to plant as a filler. November to April.

Walker Beauty. An attractive yellow Apple, covered or partially so with handsome red; large; skin tough, smooth; flesh

Tompkins County King Apple (see page 13)

One of our Wagener Trees, 40 years old. When given room, Wagener makes a spreading tree. This tree has been pruned to open it, and is now not too thick; light is apparent in its center. This was taken in its bearing year.

WINTER APPLES, continued

whitish, firm, crisp, tender, subacid, too acid for dessert, good. Tree vigorous, with long, slender, curved branches—upright to roundish in habit of growth. Comes into bearing early and is an annual cropper. November to April.

York Imperial (Johnson's Fine Winter). The fruit is uniform in size; skin tough, bright, smooth; red, with yellowish, firm, crisp flesh, mild, subacid and good. The tree is moderately vigorous, upright,

spreading and rather dense; does best on rather heavy soils south of the Baldwin belt. Our buds are from some of the best trees in Adams County, Pa., where this variety reaches perfection. Season December to February and later in storage.

Transcendent Crab. One of the most popular of the Crabs. Tree a good grower, roundish, spreading, hardy, productive and an annual bearer. Fruit medium size, yellow with red cheek or covered with red. Late August to middle of September.

DWARF APPLES

Dwarf Apples are grown by budding the desired variety upon Doucin or Paradise Apple stocks. These are bushes which grow in Europe. The Doucin causes the tree to grow about 15 to 20 feet high; the Paradise from 8 to 10 feet high. In both cases the trees can be kept smaller or, by planting the tree a little deeper, the trunk may send out a root and the tree will grow as tall as a standard.

We have a limited number of dwarfs to offer, and will have more in future years. 75 cts. each, \$5 for 10, \$35 per 100.

Varieties: Astrachan, Yellow Transparent, Oldenburg, Snow or Fameuse, McIntosh Red, Tompkins County King, Twenty Ounce, Wealthy, Baldwin, Northern Spy, Rhode Island Greening, Seek-No-Further, Spitzenburg, Sutton Beauty, Chenango Strawberry and Pimate.

For those desiring large bearing trees we have a limited number, five years planted, at \$2.50 each. Varieties on application.

PEARS

One and two years old. Standard. We never grew a better lot of Pears than we have this year. We have 100,000 yearlings conceded to be one of the best blocks in the Genesee Valley. Sturdy trees, excellent roots, and grown on heavy land. If you want trees for fall planting place your order now and have them saved for you.

Prices, except as noted:	Each	Per 10	100
XXX Grade	\$o 50	\$4 00	\$30 00
XX Grade	40	3 00	25 00
X Grade	35	2 50	20 00

Anjou. This large, greenish or yellowish Pear is somewhat coarse in texture, but is very good eating in October or November. The fruit is somewhat apt to drop from the tree, but in some sections it is a profitable variety, somewhat tardy in coming into bearing.

Bartlett. This large, crisp, excellent Pear, yellow when ripe, frequently with a bluish cheek, is of the highest flavor, juicy

Kieffer Pear tree at four years after planting. Tree is a fine grower and profitable. From this time on we shorten in each twig to two buds every winter. This pruning saves thinning and prevents overloading of the tree. It is the only way to handle Kieffer, which must be treated different from Bartlett.

A Bartlett Pear tree in its fifth year. Notice the well-laden branches.

and a vigorous grower. It bears at a comparatively early age and is a regular and persistent bearer. The fruit is usually harvested about the last of August or early portion of September. We offer an excellent lot of two-year-old and one-year-old trees of this handsome fruit.

Beurre Bosc. This large yellow or rusty Pear is one of the best grown; flesh is white, rich and delicious, being one of the best-flavored Pears we have. We have an excellent strain; in fact, all of our stock is from three trees which are of superior merit. Autumn. We offer this variety at \$1 each, \$10 per doz. Special quotation for larger quantities.

Clapp's Favorite. This large, yellow Pear, frequently with a red blush, is of high quality and is a popular variety with many. Ripens just ahead of Bartlett.

Duchesse d'Angouleme. This large fruit has a greenish skin, somewhat rusty; flesh very juicy, sweet and good, and is an excellent Pear for holding for winter; it can be harvested in October. This is, perhaps, one of the best to grow as a dwarf, but is also being planted as a standard.

Kieffer. A large, early-bearing, vigorous-growing tree; bears medium to large, yellow fruit; somewhat coarse in flavor,

PEARS, continued

but juicy and of medium quality and excellent for canning. It is quite a profitable Pear to grow, and New York Kieffers take the lead over any others on the New York market. Good for storage as it keeps in fine condition and comes out mellow and of fine flavor.

Seckel. This is one of the highest-flavored Pears we have; in fact, it is the standard of excellence; rather small, yellowish brown; flesh juicy, aromatic and rich in flavor; quality of the best. It is often called a poor grower in the nursery, but this is due to the fact that it is stocky and does not grow tall. Midautumn.

Sheldon. Medium to large, roundish Pear; has a greenish russet to brown skin; short stalk; flesh a little coarse, melting, juicy and of excellent flavor. Tree a vigorous, ascending grower. October.

Worden-Seckel. The fruit of this variety is somewhat larger than its parent, the Seckel; it is yellowish in color; flesh white, but not quite so rich as Seckel. It is, however, very good, and is one of the very finest Pears for dessert purposes, owing to its tender flesh and abundance of juice. October; will keep to December.

Wilder. This is a large, pale yellow Pear, shaded to russet-red, with pale yellow flesh, subacid, fine-grained, tender and juicy. An excellent summer Pear, and fine for dessert.

We are increasing our list of Pears this year.

Write for it

Fruit of Bartlett Pear

FRASER'S PLUM AND PRUNE TREES

One- and two-year-old trees. We have a particularly fine lot of two-year-old trees to offer.

The Plum will thrive on a large variety of soils, the chief requisite being good drainage. The two types most prevalent are the Japanese (J.) and the Domestic (D.). The Domestic, in the eastern part of the country, do best on rich clay loam, while the Japanese will do best in the same locality on a lighter soil, such as well adapted to peaches, the ideal being sandy or gravelly loam. In any event the soil must be well drained. The site must have good air-drainage, a northern slope being preferred in order that there may be every possibility of freedom from frost at the time of bloom.

Burbank Plums

	Each	Per 10	100
XXX grade.....	\$0 40	\$3 50	\$28 00
XX grade.....	35	3 00	22 00
X grade.....	30	2 50	16 00

Abundance. (J.) Fruit large; amber to bright red, with decided bloom; highly perfumed; flesh light in color, juicy, tender; freestone; season early, ripening in advance of others.

Bavay, Green Gage. (D.) One of the best of the green Plums; excellent for dessert; high flavor; good canner; keeps well. Tree medium grower; vigorous, late in bearing.

Abundance Plum Tree

PLUMS, continued

Bradshaw, or Niagara. (D.) A dark violet Plum, juicy, good; excellent for canning. Tree vigorous, productive. Ripens with peaches.

Burbank. (J.) Fruit large, oval; skin reddish purple; flesh yellow, juicy, good; one of the best of the Japanese varieties; good bearer.

Crittenden or Farleigh Damson. An excellent strain, similar to the Shropshire Damson, but more productive under certain conditions.

Diamond. (D.) Large, well formed; coarse flesh, poor to moderate flavor; vigorous grower, hardy, productive; ships well; it is frequently a good money-maker.

French Damson. The largest of the Damsons, one which is probably destined to have a larger place in the future because of its size.

German Prune. (D.) Purplish black fruit; tree medium to large; one of the best-known Plums in the East; flesh yellowish green. Strains of this variety have been developed all over the country.

Gueii. (D.) A standard variety; poor in quality; bears early and abundantly; tree large, vigorous, healthy, hardy; fruit an excellent shipper; good money-maker; season of ripening rather late; color purple; size large; subacid.

Lombard. (D.) One of the most easily grown of all Plums; hardy and productive; handsome reddish color; flesh yellow, juicy and pleasant; abundant yielder, vigorous grower, hardy; much used as a stock upon which to graft weaker-growing varieties. Frequently grown for canning.

Miller's Superb. (D.) One of the highest-flavored yellow Plums grown; it should be in every home garden.

Monarch. (D.) One of the most popular of the recent introductions; moderate in quality; purple; large, roundish oval; free-stone; good bearer; season October.

Reine Claude. (D.) The highest in quality and somewhat difficult to secure true to type. Tree a moderate grower, quite productive, needs to be headed low in order to protect the trunk from sun-scald; it deserves a place in every orchard. One of the best of the Green Gage types.

Shropshire Damson. An excellent market Plum; small, blue; excellent bearer, hardy; one of the best of the Damsons; highly prized for canning and preserving. Tree is not a very rapid grower.

Italian Prune, York State Prune and **Fellenburg** are strains of the German Prune, but are somewhat larger. We quote on all these strains.

QUINCES

The Quince is best grown as a bush rather than as a tree; frequently three or four main branches are developed. Fire-blight, the main trouble, is controlled by cutting out the affected branch about 10 or 12 inches below the apparent point of infection, and disinfecting the cut surface with corrosive sublimate. 1 to 1,000. The plants may need patrolling twice a week to control this and it will pay. Bordeaux mixture is the best fungicide and arsenate of lead a satisfactory insecticide.

	Each	10	100
XXX Grade..	\$0 40	\$3 50	\$25 00
XX Grade...	35	3 00	20 00

Bourgeat. This is regarded as one of the most vigorous growers; late keeper.

Champion. Very early bearer; little later than Orange. Tree is a relatively strong grower.

Orange. This is the standard Quince; fruit large; golden yellow; somewhat apt

Champion Quince

to blight, but this is common to all Quinces. For commercial planting this is one of the best.

Rea's Mammoth. One of the largest Quinces.

CHERRIES

There are two main types of Cherry, **Sweet** and **Sour**. The **Sour Cherries** are divided into three groups:

1. The Morello, including such varieties as the English Morello.

2. The Montmorency group, including the Montmorency and Early Richmond, which are usually light-colored Sour Cherries.

3. The Dukes; these are heart-shaped like the Sweet Cherry, but have an acid or sub-acid flavor, and are frequently spoken of as Sour varieties. In all other respects they can be classified with the Sweet varieties.

Sweet Cherries are heart-shaped, firm-fleshed Cherries without an acid flavor. The ideal soil for the Sweet Cherry is a deep gravelly or sandy loam, a clay subsoil may be tolerated if the land is well drained. The soil should have a sufficient quantity of organic matter so that it will retain moisture well and furnish an adequate supply during an adverse season. It is important, however, that the soil be not too rich, for if it stimulates too rank a growth, serious injury to the trunk is apt to follow, also the trees are not apt to bear well. The Sour Cherry will thrive under similar conditions or it may be grown on clay loam if well drained, with profit. The site is quite important, a northern slope is preferred. Generally speaking the Cherry can be classed as a hardy fruit, for the temperature may fall to 20 degrees below zero without injury to fruit-buds. The Sweet Cherry is more susceptible to injury than the Sour Cherry.

Early Richmond Cherries

CHERRIES, continued

The growth of the two classes of Cherries is quite different, the Sweet Cherries growing into a tall, erect tree of handsome shape, while the trees of the Sour type are inclined to be low-headed and spreading. The Sweet Cherry is often used as an ornamental tree on the lawn.

Prices—Mazzard stock.			
old.	Each	Per 10	100
XXX grade.....	\$0 50	\$4 00	\$35 00
XX grade.....	40	3 50	30 00

Prices—Mahaleb stock.			
old.	Each	Per 10	100
XXX grade.....	\$0 40	\$3 00	\$25 00
XX grade.....	30	2 50	20 00
X grade.....	25	2 00	15 00

MAIN VARIETIES OF THE SOUR TYPE

Early Richmond. This is a medium-sized Cherry; light red; is from seven to ten days earlier than the Montmorency; it does not ship well. Tree is hardy and vigorous, a profuse and regular bearer.

English Morello. This is classed as one of the best sorts, being relatively productive, hardy, firm and an excellent shipper, its main advantage being that it comes after Montmorency. It is one of the oldest varieties. Tree is medium in size and spreading, somewhat slender.

Montmorency. Of this variety there are at least two types, but the Montmorency Ordinaire is the one which is most generally sold, and is the one which should be grown. It is the long-stemmed type. This is the standard variety for canning. The fruit is of good size, fine flavor, and has a bright, clear, shining red skin. Flesh is of fine quality and subacid. It is a good shipper and makes a most attractive appearance in market where it usually brings good prices.

MAIN VARIETIES OF THE SWEET TYPE

Bing. This is a very hardy, vigorous-growing tree with heavy foliage. It succeeds relatively well in the East; fruit is large, dark brown or black and of good quality. It is a good shipper.

Montmorency Cherries

Black Tartarian. This is a well-known, large, black, heart-shaped Sweet Cherry; upright in growth, vigorous and regular bearer.

Governor Wood. This variety is better for a nearby market than for shipping. Tree is vigorous and productive; fruit pale yellow.

Lambert. Fruit large to very large, heart-shaped, dark amber, turning a rich magenta; flesh dark, rich, firm, juicy; flavor good; pit small for so large fruit.

Napoleon, or Royal Ann. A large, sweet, pale yellow Cherry, with a bright red cheek, one of the best; splendid shipper; excellent for canning or to eat out of hand. Very firm flesh, juicy. Good grower and prolific. Should be planted in the East.

Schmidt's Bigarreau. Fruit very large, mahogany-color; flesh dark, tender and very juicy, very good flavor; excellent shipper.

Windsor. Fruit large, liver-colored, handsome, firm, fine quality; comes into bearing early. Tree hardy, vigorous, prolific. Should be included in almost all Cherry orchards in the eastern states.

Industry Gooseberries

GOOSEBERRIES

Gooseberries must be planted on the best land on the farm, the richer it is the better. There is no use placing them, however, on a site where there is poor air-drainage; a northern exposure is preferable, but air-drainage is absolutely necessary. If planted in a small inclosure with a fence around, as in a garden, or inclosed by woods, the European varieties are apt to mildew.

There are two main classes, the European (E.) and the American (A.) Of the Europeans but few varieties are of much commercial importance.

Prices: 20 cts. each, \$10 per 100, \$90 per 1,000, except for Industry and Whitesmith, which are 20 cts. each, \$15 per 100, \$120 per 1,000.

Downing. (A.) One of the largest and best. Good size; fine quality; good appearance; vigorous grower; free from mildew. Color light green; good flavor; much larger than Houghton.

Houghton. (A.) Good grower;

berries apt to be small, dark red; thin skinned, juicy, sweet, good flavor.

Industry. (E.) A large, red berry when ripe.

In addition we are fruiting the following, in order to make sure they are correct before propagating for our trade, as we do not care to offer them unless we know them.

Chautauqua. (A.) A very large, superior and productive berry; yellowish white when ripe.

Poorman. (A.) One of the most promising; a large berry.

We can furnish other varieties; correspondence invited.

CURRANTS

Currants are grown on a variety of soils, different varieties often showing varying degrees of adaptability. Selection of the right variety is the important feature of the business. Adequate air-drainage must be furnished. There is no use planting them in a frost pocket.

Prices: 10 cts. each, \$7.50 per 100, \$55 per 1,000, except for Boskoop Giant, Diploma and Perfection, which are 20 cts. each, \$15 per 100, \$100 per 1,000.

Boskoop Giant. Large; black; vigorous, productive.

Cherry. Is not so large as Fay; red; strong grower.

Diploma. Red; large; good quality; strong grower.

Fay. Large, red, strong-growing variety, somewhat apt to droop, but is generally well adapted to conditions; needs to be well fed.

Perfection Currants (see page 22)

CURRENTS, continued

Lee's Black. An improvement on Black Naples. Large; black; bush vigorous grower, productive.

Perfection. Large; red; rich, somewhat mild; fewer seeds than some other varieties; good bearer; easily harvested and always in demand.

Pomona. Bright red; good quality, juicy; hangs well after ripening; frequently a heavy bearer.

Prince Albert. Red; bunches are apt to be short; fruit medium size; canes strong; very late; hangs on for a full month after Fay.

Victoria. Red; fruit apt to be small; foliage shows more resistance to leaf troubles than some other varieties, also greater freedom from borers.

White Imperial. One of the best white Currants; sweet, rich, fine for dessert; satisfactory in growth and foliage; hardy and productive.

White Grape. Large; good quality, slightly acid; productive.

Wilder. Regarded as one of the strongest growers and as a most productive variety; the fruit hangs on well; red; fine quality; more upright in growth than Fay.

BLACKBERRIES

Strong, well-rooted plants, 25c. for 3, 75c. for 10, \$2 per 100, except as noted otherwise

Ancient Briton. Hardy; productive. One of the old good ones.

Blower. Large; jet black. Good shipper and good quality. \$3 per 100.

Early Harvest. One of the earliest.

Among other varieties are Erie, Snyder, Wilson's Early, Kittatinny and Ward.

Eldorado. Vine hardy and vigorous; berries large, jet-black; very good. \$3 per 100.

Minnewaska. Hardy, productive and early; strong grower.

RASPBERRIES

50 cts. for 10, \$2.25 per 100

RED RASPBERRIES

Cuthbert. The best red Raspberry for market. Large, crimson, firm; excellent quality; strong grower.

Loudon. Hardy, productive, large.

Marlboro. One of the best early red Raspberries.

BLACK AND PURPLE RASPBERRIES

Columbian. Strong grower, hardy; fruit large, dark red, bordering on purple; productive.

Diamond. One of the most productive Raspberries; of fine quality and flavor; largely grown for evaporating.

Gregg. Good size; quality good. One of the standards.

Ohio. Strong and hardy; fruit medium to large; productive.

Kansas. Black; firm, of good quality. One of the hardiest known and one of the best.

Plum Farmer. One of the best of the recent introductions.

Shaffer's Colossal. Purple. Canes wonderfully vigorous and productive; berries large.

Kansas Raspberries

Every farmer and fruit-grower needs a Raspberry and Blackberry patch. Raspberries have been high-priced for sometime now, and the clearing up of woodlands is forcing the cultivation of the Blackberry, if we would enjoy Blackberry pie, and a lot of people want these fruits. That man is wise who goes into small-fruit growing intelligently. He has a future. Put out large blocks of single varieties, and look after them. In one word, "concentrate!"

Hedge of California Privet

Ornamental Department

We have an excellent collection of Ornamentals, which were grown for a private planting; everything was given an extra amount of space, and the plants are what you would like to plant. It takes land and time and money to grow such, but there is satisfaction in growing and offering them for sale, and we know they will please you. The list is long and we can furnish it to all who are interested. Send us your lists, we can help you select the best for your location,

HEDGES

CALIFORNIA PRIVET (Two-year plants)

	Each	Per 10	100	1,000
18 to 24 inches high.....	\$0 05	\$0 45	\$3 00	\$25 00
24 to 30 inches high.....	08	65	4 50	40 00

BARBERRY, THUNBERG'S (Excellent for dwarf hedges)

	Each	Per 10	100	1,000
6 to 12 inches high.....	\$0 15	\$1 00	\$8 00	\$75 00
12 to 15 inches high.....	20	1 50	10 00	

JAPAN QUINCE

12 to 18 inches high.....			6 00	
18 to 24 inches high.....			8 00	

AMERICAN ARBORVITÆ

	Each	Per 10	100	
12 to 18 inches high.....	\$0 25	\$2 00	\$15 00	
18 to 24 inches high.....	35	3 00	25 00	

SHADE AND EVERGREEN TREES

	Each	Per 10	100	1,000
Norway Maple. 4 to 5 ft., ½-in. cal.....	\$0 30	\$2 50	\$22 00	\$200 00
7 to 8 ft., 1-in. cal.....	75	7 00	60 00	500 00
10 to 12 ft., 2-in. cal.....	2 00			
Silver Maple. 8 to 10 ft.....	75	7 00	60 00	
Sugar Maple. 7 to 8 ft., 1-in. cal.....	75	7 00	60 00	500 00
Schwedler's Maple. 5 ft.....	75			
Wier's Cut-leaved Maple. 6 to 8 ft.....	60	5 00		
Purple Beech. 3 to 4 ft.....	80	4 50		
4 to 5 ft.....	1 00	6 00		
Catalpa speciosa. 7 to 8 ft., 1-in. cal.....	50	4 50		
American Elm. 6 to 8 ft.....	60	5 00	40 00	
Horse-Chestnut. 4 to 5 ft.....	50	5 00		
American Linden. 5 to 6 ft.....	70	6 00	50 00	
6 to 8 ft.....	75	7 00	60 00	
Carolina Poplar. 8 to 10 ft.....	30	2 50	20 00	
Norway Spruce. 1½ to 2 ft.....	30	2 50	20 00	
2 to 3 ft.....	40	3 00	25 00	
Colorado Blue Spruce. 6 to 12 in., 75 cts. each; 1 ft. \$1, 2 ft. \$2, 3 ft. \$3, 4 ft. \$6.				

If you decide to make a planting of ornamentals around the house or grounds, please submit your list to us. We shall be glad to quote on same.

PEACHES

We have this year budded a number of Peach trees, taking the buds from our own orchard, and will continue this line. We shall offer these in the fall of 1914, but book orders for them now. We have most of the leading varieties. For those who desire

few Peaches included in their orders, we have secured a quantity from a reliable grower, some of which we intend to plant, and offer them at 16 cts. each, \$1.40 for 10, \$12 per 100, including such varieties as Mayflower, Carman, Greensboro, Champion, Belle of Georgia, Elberta and Salway.

Glen Mary Strawberry

STRAWBERRIES

We offer reliable plants from one of the best growers at 75 cts. per 100, \$5 per 1,000. Varieties: Senator Dunlap, Jessie, Sharpless, Glen Mary, Marshall, Brandywine, Sample, Warfield, Wm. Belt. Strawberries are best sent by express.

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STATE OF NEW YORK—DEPARTMENT OF AGRICULTURE
CERTIFICATE OF INSPECTION OF NURSERY STOCK, No. 1152

This is to Certify, that the stock in the Nursery of Samuel Fraser, Geneseo, County of Livingston, State of New York, was duly examined in compliance with the provisions of Section 305 of the Agricultural Law, and it was found to be apparently free from any contagious or infectious disease or diseases, or the San Jose scale or other dangerously injurious insect pest or pests. This certificate expires September 1, 1914.

Dated, Albany, N. Y., *September 19, 1913.*

CALVIN J. HUSON,
Commissioner of Agriculture

Order Sheet
SAMUEL FRASER
GENESEO, N. Y.

Enclosed Find Post Office Money Order . \$ _____
 " " Express Money Order . . \$ _____
 " " Cash \$ _____
 " " Draft \$ _____

State _____

[illegible]

All orders must be accompanied with the money

[illegible]

Bargains

Start an Orchard. Trees are Cheap. There is no use being without fruit. You can grow it easier than buy it. If you have an orchard, a dollar will probably fill the vacancies in it. All of the trees offered are propagated from trees known to be true to name, and good specimens.

10 Apple Trees for \$1

SOUTHERN COLLECTION FOR NEW JERSEY AND SOUTH

Rome Beauty	Red Astrachan	Wagener
Ben Davis	Wealthy	Boiken
Stark	Walker Beauty	York Imperial
	Beitigheimer	

NORTHERN COLLECTION FOR NEW YORK AND NEW ENGLAND

Rome Beauty	Snow	Rhode Island
Ben Davis	McIntosh Red	Greening
Baldwin	Wagener	Stark
Northern Spy	Golden Russet	

6 Pear and Plum Trees for \$1

2 Kieffer, 1 Clapp's Favorite, 1 Bartlett, 1 Shropshire Damson, 1 German Prune

GARDEN COLLECTION, 8 Trees for \$1

1 Kieffer Pear	1 Baldwin or Rhode	1 Wagener or Stark Apple
1 Clapp's Favorite Pear	Island Greening Apple	1 McIntosh Red Apple
1 Shropshire Damson	1 Northern Spy Apple	1 Montmorency Cherry

10 Apple Trees for \$1

Until sold we will send 10 Apple Trees of any of the following varieties for \$1. The trees are 3 to 4 feet tall, and branched. Orders will be filled in the order they are received. Give second and third choice, in the event of our being sold out of the one you want.

Baldwin	Golden Russet	Rhode Island Greening	Twenty Ounce
Beitigheimer	Maiden Blush	Rome Beauty	Wagener
Ben Davis	McIntosh Red	Stark	Wealthy
Boiken	Northern Spy	Tompkins County King	York Imperial
Fameuse	Oldenburg	Transcendent Crab	

6 Pear Trees for \$1

As long as they last. Trees 4 ft. and up, branched. Six of any one of the following:

Kieffer	Clapp's Favorite	Bartlett
---------	------------------	----------

5 Plum Trees for \$1

Trees 4 feet tall, branched. Five of any one of the following:

Abundance	Burbank	German Prune	Miller's Superb
Bavay Green Gage	Crittenden Damson	Gueii	Monarch
Bradshaw	Diamond	Italian Prune	Shropshire Damson
	French Damson	Lombard	

RELATIVE PROFITS IN FRUIT-GROWING

Apples are easier to handle than any other fruit; they are not so perishable; can be kept longer if the market is unfavorable. With other fruits there is a greater risk.

Mr. B. J. Case, of Sodus, N. Y., as the result of the compilation of six years' records, 1906-11, found that his fruits left him the following net returns per acre per year:

Apples, 25 acres	\$124 16	Peaches, 20 acres	\$45 75
Cherries, 4 "	173 55	Pears, 10 "	95 40
Grapes, 21 "	39 80	Plums, 5 "	43 06

RHODE ISLAND GREENING TREE WHICH BORE FOURTEEN BARRELS (ONE OF OUR TYPICAL TREES)

We leave Greening trees thicker than Baldwin because shade tends to keep the fruit green. The Greening is a spreading grower, and the limbs will come to the ground if given room. We picked six barrels from this tree without using a ladder.