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FREE TALK

VOL. IV.

NO. 8

SPECIAL EDITION

Of All That Is Good,
Iowa Affords the Best.

THE
Wragg
NURSERY

DES MOINES,

IOWA.

AS MOST OF OUR BUSINESS IS DONE BY MEANS OF MAIL ORDERS, THE FOLLOWING SUGGESTIONS WILL BE OF BENEFIT.

1. It is advisable to send in your orders early, particularly if long transportation is necessary, and thus we shall be prepared to ship early.
2. Write your orders plainly on a separate piece of paper (use Order Sheet enclosed), and not in body of letter. State definitely varieties, age, size and number, whether standard or dwarf, and route by which you wish the goods shipped.
3. All orders from unknown parties should be accompanied by cash, or satisfactory reference.
4. We are in no case responsible for loss or damage to goods in transit. Our responsibility ceases on delivery to shipping agents.
5. If selection of varieties is left to us, we will select according to our best judgment and long experience. Where varieties are specified we will substitute, for such as we may not have, kinds equally good and ripening at the same season, unless otherwise ordered.
6. In case of any mistake on our part, immediate notice should be given, so that it may be rectified or explained.

THE WAY WE DO BUSINESS.

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

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

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

Consult our list, and, if anything you want is not found, let us know and we will try to get it for you.

ADVICE TO PLANTERS.

Select thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous, and they bear transplanting better and are far more apt to live; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth.

Choose good, rich soil, with sufficient slope to the north or northeast, if convenient. Avoid sandy bottoms or knobs and points. Prepare the soil thoroughly, lay off in rows north and south with the plow, as deeply as possible; it will save half the digging. Every 16 to 20 feet in the row, dig a hole deep enough so that the tree will sit a little deeper than it stood in the nursery, and large enough to admit all the roots spread out in their natural position.

Planting.—Never expose the roots to the sun and wind more than can be helped. Cut off broken and bruised roots, and shorten the tops to correspond with the roots. Plant the heaviest part of the top toward the southwest, and lean the tree the same way at an angle of about 45 degrees. Sift the soil in around the roots carefully, filling in all crevices; when well covered, tramp it down solidly; if very dry, pour in some water, and, after it has soaked away, fill in the top with loose soil to prevent baking. After the trees are nicely started, a mulch of straw or litter will be beneficial.

Cultivate your young trees and shrubs at least as well as you do your corn, up to the 1st of July, and then let them ripen up for winter. Pumpkin vines make an excellent shade for the orchard soil.

Rows.—Let them be as far apart as your conscience will allow.

Frozen Stock.—If received in that condition, place in a cool cellar, and do not disturb until they are completely thawed out.

ENTOMOLOGIST'S CERTIFICATE OF NURSERY INSPECTION.

We are prepared to furnish, with each shipment of nursery stock, a certificate from our State Entomologist showing that our nurseries have been inspected according to law. We have already made arrangements with the proper officers or boards of the states requiring that certificates be furnished them.

The Mission of this Catalogue

WITH the experience of almost a lifetime behind us—our Company being one of the oldest of its kind in Iowa—with an intimate knowledge of the soil, climate and conditions of this part of our country, with a desire to impart that knowledge to others and to encourage the raising of more and better fruit than has been the rule in this section, with the hope that we can by it stimulate the growing desire of our people for more beautiful home surroundings by pointing out to them the proper kinds of trees, vines, shrubs and flowers to plant, we send out this new Catalogue on its mission of helpfulness, with a determination to make the name of our Company a synonym for all that is best in nursery stock, knowing that good stock, truthfully described and sold at reasonable prices, is bound to bring success.

Carrying out this rule, we propose to be sure that every item of stock, whether it be fruit, shade or ornamental trees, vines or plants, be first-class in every respect and true to name. Our descriptions are short and accurate, and may be relied upon, and our prices are as low as it is possible to make them, taking into consideration the size and quality of the stock we supply.

Our manager, M. J. Wragg, is looked upon as one of the best authorities in the trade in the Northwest. He was one of the Jury of Awards on Fruit in the Pomological Section of the Louisiana Purchase Exposition, is Agricultural Editor of the newspapers controlled by the Western Newspaper Union, Director of the Department of Agriculture of Iowa, Ex-president of the Iowa Horticultural Society, director of an experiment station, is connected with the Frisco Orchard Company, of Kansas City, Mo., as Horticultural Superintendent and one of the Board of Directors, and was awarded a special gold medal at the St. Louis Fair for the largest and best collection of Cherries and Plums from the state of Iowa.

With such a reputation to maintain, it can readily be seen that the stock sent out by our Company will be all the most captious can demand, and those we have the pleasure of enrolling on our list of patrons may ever feel assured of strictly honorable dealing on our part, combined with our earnest and continuous efforts to please.

Our location in the midst of the great Mississippi valley, furnishes a quality of soil best suited to produce the healthiest conditions of growth, with solid, firm texture of wood, with abundant fibrous roots, so necessary to successful transplanting, and enables us to offer the products of our nurseries with entire confidence to planters in all sections of the country. In our nearly thirty years' experience in growing nursery stock in central Iowa, we have experimented with nearly all kinds of fruits and ornamentals, and are able to offer the benefit of our experience to our customers.

Our shipping facilities are first-class, being situated, as we are, in the center of the state, at Des Moines, where all the railroads center, which gives us excellent facilities for handling freight or express to every point in the state.

In our extensive collection of nursery stock herein offered, we call your special attention to the **Wragg Cherry**, **Saylor Cherry**, **Stoddard Plum** and **Iowa Raspberry**. These varieties are already being extensively propagated through the East and South, and have now become standard varieties. The **Stoddard** stands at the head of our large, first-class native plums. It is a prolific bearer, of excellent flavor. The **Iowa Raspberry** was introduced by us, and, wherever it is planted and becomes known, everyone speaks of it with the highest words of praise. We are also growing many new varieties of Evergreens, Currants, and especially Roses and Herbaceous Plants.

We invite your careful reading of the following pages, and solicit your business. Our best customers are those who know us best. We have nothing to conceal—no trade secrets. **WE DEAL DIRECTLY WITH THE PUBLIC**, and are always glad to welcome customers to our nursery, where we will take pleasure in showing them all features of interest, and will cheerfully answer all questions.

Thanking our old friends for past favors, a continuance of which we hope to merit, and hoping to make many new ones for our mutual benefit, we remain,

Yours very truly,

THE M. J. WRAGG NURSERY COMPANY,

M. J. WRAGG, Manager.

300, 301, 302 Good Block, DES MOINES, IOWA.

Landscape Gardening

MORE attention is being paid every year to the proper beautifying of grounds surrounding our homes. The vast increase of literature on this and kindred subjects has caused our people to become keenly alive to the fact that as much thought and attention should be devoted to the environments of a house as to the house itself, and they realize that a house and its surroundings should be considered as a whole. Too often is the effect of a good painting spoiled by injudicious framing, and the grounds of a home should be considered as a frame to the picture represented by the house. On the other hand, a poor picture may be wonderfully improved by proper framing, and, in the same way, a house, inartistic in itself, may be made a thing of beauty by giving expert attention to the proper laying out and beautifying of its surrounding grounds.

To do this correctly, the first thing necessary is a well-executed plan of the property drawn to scale, showing the shape, dimensions and position of the house, other buildings and existing drives, trees, fences, etc. Walks and drives should be laid out with a view to their ornament and utility, and on this plan should be indicated the kind and variety and position of all trees, shrubs and plants advisable to use. All this requires expert knowledge. The day is past when property-owners were willing to yield to the blandishments of the persuasive tree-salesman, and allow him to stick a tree here, a bush there and plants somewhere else, all considered solely with a view to the size of the order he wanted to send in to the concern employing him. All over the country we see the results of such work, and many otherwise beautiful home grounds have been made grotesque by such injudicious action.

With the above points in view, we offer a few hints as to the proper planting and care of a place, suggesting that, no matter how small or large the property is, be it a city lot or an estate of many acres, if the work is to be well and intelligently done it must be based upon a plan. In landscape gardening the eye of the mind must see two pictures: the work as it will look when first completed, and as it will look years hence, when mellowed by time with the full growth of the materials planted.

Drives and walks should be as few and short as possible. Next to convenience, grace must be considered. A slight curve is more graceful and natural in appearance than a straight line. Another fixed principle is that walks, drives and plantings shall be so located as to leave as broad a stretch of open lawn as can be preserved.

References

We refer by permission to

Sen. A. B. Cummins, Senator from Iowa S. F. Foft, Cashier Bank of Waukee, Iowa
 Hon. Jno. Cownie, Chairman Board of Control for Iowa
 W. W. Gwinn, Fruit Grower, Ford, Iowa J. A. T. Hull, Congressman Seventh District
 D. F. Witter, Vice President Commercial Savings Bank
 A. C. Miller, Cashier Home Savings Bank
 Bradstreet's Mercantile Agency R. G. Dun Mercantile Agency
 Or any other business man in the city.

Cemetery Work

Not many towns of the middle West have park areas laid aside for the enjoyment of the people; but every town has at least one cemetery. More than that, nearly every rural church has its burial ground. Dear as is the ground where are laid to rest the dead, and consecrated as it may be by the tears of the bereaved, yet there is seldom a spot so universally neglected as is the cemetery. Even where the burial ground is not allowed to grow up to weeds, or the monuments permitted to topple over and decay, the place is usually rendered cheerless and ghostly by multitudes of crowded tombstones, barren lots raised above the level of the alleyways, and unsightly tangles of poorly placed shrubbery.

In many of our modern cities, especially American cities which have comprehensive park systems, the old style of "grave-yard" is rapidly giving place to beautiful, park-like cemeteries. Restrictions have been placed both upon the number and the style of monuments, the grounds are conveniently accessible by means of winding drives, and a warm green carpet of grass is seen everywhere, shaded by wisely placed trees and framed in by graceful groups of shrubbery and flower beds in subdued tints.

This movement has already begun to spread among the smaller towns of Iowa. Our Landscape Department has drawn up a considerable number of cemetery plans in all sections of the state, and we have received many flattering comments on the improvements we have been able to make both in old cemeteries and also in new additions to old burial grounds. In every case, a new problem has had to be dealt with. There are many questions to be settled as to shape and economical size of lots, position of entrance and location of drives, drainage and grouping of shrubbery. The cost of a carefully drawn plan, after local investigations and surveys, will always be saved many times over, and oftentimes the cemetery becomes the most beautiful place in town. In some cases we have drawn plans combining the town cemetery with a park so that both may be looked after by the same caretaker.

We are making a specialty of cemetery work along the line of modern landscape ideals, and invite any interested parties to write us for further information on the subject.

Number of Trees Sufficient to Plant an Acre.

Feet.	Trees.	Feet.	Trees.	Feet.	Trees.
1 by 1.....	43,560	8 by 8.....	680	16 by 16.....	170
2 by 2.....	10,890	9 by 9.....	537	17 by 17.....	150
3 by 3.....	4,840	10 by 10.....	435	18 by 18.....	134
4 by 4.....	2,722	11 by 11.....	360	19 by 19.....	120
5 by 5.....	1,742	12 by 12.....	302	20 by 20.....	108
6 by 6.....	1,210	13 by 13.....	257	25 by 25.....	69
7 by 7.....	888	14 by 14.....	222	30 by 30.....	48
		15 by 15.....	193		

Distances for Planting.

	Feet Apart.
Standard Apples	30
Standard Pears	25
Dwarf Pears	10
Standard Cherries	15
Plums, Peaches, Apricots	15
Quinces and Grapes	10
Currants, Gooseberries, Raspberries and Rhubarb.....	4
Asparagus	3x4 to 6

N. W. GREENING

WEALTHY

Fruit Department

Apples

The first fruit, both in importance and general culture, is the Apple. No fruit is more in demand, more universally liked, or more generally used. The earlier varieties ripen about the last of June, and the later sorts can be kept until that season; it is a fruit in perfection the entire year. Make a judicious selection of summer, autumn and winter sorts, and a constant succession can be had the whole year.

Its uses are many and of inestimable value. It has been said that "fruit is nature's own remedy;" it is certainly nature's own preventive, for the history of exploration, colonization and war shows that many diseases come soon after the supply of a fruit or vegetable diet is exhausted. Many diseases are not known to free users of fruit and vegetables. There is no farm crop which, on the average, will produce one-fourth as much income per acre as will a good Apple orchard. We grow over one hundred sorts in our nursery, but advise beginners to plant not more than twenty varieties.

DUCHESS OF OLDENBURG

SUMMER APPLES

BENONI—Medium; roundish; pale yellow, shaded with crimson, juicy, tender sub-acid. August.

CAROLINA RED JUNE—Tree a moderate, upright grower; an early and abundant bearer. Fruit small to medium, oblong, surface smooth, color dark red, with white ground; flesh white, very tender, fine grained, juicy, acid. June and July.

DUCHESS OF OLDENBURG—A large, beau-

tiful apple, roundish. Streaked red and yellow. Tender, juicy and pleasant. Tree a vigorous, fine grower and abundant bearer. Very hardy. September.

EARLY HARVEST.—Tree healthy, vigorous and a good bearer. Fruit medium size, nearly round, somewhat flattened; surface smooth, clear, waxy yellow, rarely blushed; flesh tender, juicy, acid to sub-acid, flavor good. July.

GOLDEN SWEET—Large, pale yellow, very sweet and good; good bearer; free. August.

RED ASTRACHAN—Tree vigorous, upright, hardy and productive. Fruit medium to large; surface smooth, marbled and striped on greenish yellow; flavor acid.

RED JUNE—Medium; red; flesh white, tender, juicy, good flavor. Abundant bearer. Last of June.

SOPS OF WINE—Medium size; red; flesh white, often stained; mild and pleasant; productive; free. July and August.

SWEET BOUGH—Large, pale greenish yellow, tender and sweet; good bearer; moderate. July and August.

SWEET JUNE—Tree is strong, upright, very productive. Fruit small to medium, round; greenish yellow; flesh white, fine grained, tender. June and July.

TETOSKY—Tree upright, dwarfish grower; bears annually and extremely early. Very backward, and hard to grow in nursery. July and August.

YELLOW TRANSPARENT—A Russian apple. The tree is a hardy, upright grower; regular and early bearer, medium size. Color a rich, transparent yellow with a faint flush on sunny side; flesh melting, juicy, sub-acid.

YELLOW TRANSPARENT

AUTUMN APPLES

ALEXANDER. (Emperor Russia.)—Large, deep red or crimson; flesh yellowish white, crisp, tender, with pleasant flavor; very hardy; mod. October.

AUTUMN STRAWBERRY—Medium, roundish, inclined to oval; streaked with red. Productive and desirable. Not hardy north. September.

CHENANGO—Medium, oblong; skin whitish, splashed and mottled with red. Fruit handsome, esteemed for table and especially prized for market. Tree vigorous. Not hardy north. August and September.

COLE QUINCE—Large, yellow, ribbed, hardy, productive, August and September. Specially good for cooking where the quince flavor is liked.

DOMINIE. (Well's English Red Streak.)—Medium, skin greenish yellow; flesh very tender and pleasant; tree vigorous and prolific. October to December.

FAMEUSE. (Snow Apple.)—Medium size, roundish; crimson, sometimes striped in northern localities. Flesh snowy white; very tender, fine, juicy, mild, sub-acid; one of the finest dessert fruits. Hardy and prolific. Very popular. October and December.

HAAS—Large, flat, ribbed or quartered; yellowish green, streaked and nearly covered with dull, brownish red; flesh white, tender, juicy, sub-acid. Quality fair. Tree an extremely vigorous grower, hardy. October and November.

Which do you prefer, salt pork or fruit?

LOWELL OR ORANGE—Large, roundish, slightly conical; green, becoming rich yellow; surface oily; flesh yellowish white, sub-acid, excellent; good bearer; free. September.

MAIDEN BLUSH—Large, smooth, regular, evenly shaded red cheek or blush on a pale yellow ground; flesh white, tender, sprightly, with a pleasant sub-acid flavor; bears large crops; free. August to October.

RAMBO—Medium; yellow, striped with red. Fruit mild, tender, good. September to November.

RAMSDELL SWEET—Rather large, oblong; dark red; best fall sweet. Tree vigorous, upright, productive, hardy. October to December.

UTTER (Red)—Rather large; red-striped. Very hardy on prairie; productive and of excellent quality. Immensely popular where known. September to December.

WOLF RIVER—Extra large and handsome; deep red; excellent for cooking. Extremely hardy in the north. Probably the largest red apple adapted to this region. September to November.

WEALTHY—Origin, Minnesota. Large, round; red; very handsome; fine quality; good grower. Perfectly hardy and most reliable. Very popular throughout the north. January.

ROME BEAUTY

Long keeper in cold storage. October to

WINTER APPLES

AKIN RED—This apple is rapidly coming to the front. The original tree, over sixty years old, is still living and bears large crops annually. It is a deep, red apple of medium size and most excellent quality. Very productive and a late keeper.

ARKANSAS BLACK—Vigorous, upright grower. Fruit medium to large; fine flavor, beautiful dark color, almost black; flesh yellowish; slightly sub-acid, crisp. One of the best for cooking. January to March.

BALDWIN—Large; deep, bright red. Flesh juicy, crisp and of good flavor. Tree vigorous in the East and South, though not sufficiently hardy North. November and December.

BEN DAVIS—Tree thrifty, upright grower of almost perfect shape. Fruit large, round, sometimes variable in form; surface smooth, often polished yellow, covered and splashed bright red; flesh white, tender, juicy, flavor sub-acid, not rich quality; only good for market and cooking. November to spring.

BISMARCK—Hardy, and productive; is doing well in nearly all places. Fruit large, yellow, shaded and covered

BEN DAVIS

Our trees grow. It's their nature.

with red; tender, sub-acid, quality not best, good for cooking. Its most remarkable characteristic is its early fruiting habit; one-year grafts have produced fine specimens and two-year trees seldom fail to produce fruit. Late fall and early winter.

BLACK ANNETTE—Medium, very dark red; mild sub-acid; spicy, good. This has proved one of the hardiest and best winter apples. February.

GANO

shallow, sometimes deep; eye large, cavity deep, brown in color; stem medium to long; core medium; seeds large. Season January to April." Tree very vigorous and hardy, having stood 32° below zero without injury. A rapid grower; large and spreading in orchard; fruit-spurs numerous; shoots long, smooth, brown, with protuberances on the limbs. Valuable market variety.

IOWA BLUSH—Medium or less; quality only fair; tart flavor. Tree extremely vigorous and hardy. November to February.

JONATHAN—Tree of rather slender growth and spreading habit; fruit medium or above in size, round or oblong; surface very smooth, waxy yellow, often wholly covered with brilliant red; flesh whitish yellow, tender, very juicy; for dessert and cooking; quality best. October and November.

KING—Large and handsome, striped red and yellow, tree vigorous and productive. November and December.

LANSINGBURG—Tree upright, spreading and productive; fruit medium, roundish, oblate, yellow, largely overspread with grayish red, flesh firm, mild, sub-acid; good; valuable mainly for its long keeping qualities; vigorous. January to June.

LONGFIELD—One of the imported Russian varieties; a free, upright 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, sub-acid. December to March.

MALINDA—This fine late keeper has flourished and borne fruit in Minnesota and northern Iowa for more than twenty years, and has proven hardier than any other long keeper. Fruit medium, conical, yellow, fine-grained and nearly sweet.

MAMMOTH BLACK TWIG—It is one of the most valuable and profitable apples grown. It resembles in every way the Wine Sap, of which it is no doubt a sport, except that it is one-third to one-half larger. The trees are also the same in habit of growth, color of bark and foliage, but the Black Twig is the stronger grower, and makes a handsome tree in the nursery and orchard.

MANN—Tree a strong, upright grower; fruit medium to large, roundish, oblate, skin deep yellow when fully ripe, often with a shade of brownish red; flesh yellowish, half tender, juicy, mild pleasant, sub-acid, good to very good. An early and annual bearer.

MINKLER—Fruit medium, roundish oblate, slightly conical; pale greenish yellow, striped and splashed with two shades of red, flesh yellowish, compact, moderately juicy, mild, pleasant, sub-acid; tree an irregular grower, vigorous. January to April.

GRIMES GOLDEN—This is one of the most popular apples in cultivation. Tree strong, thrifty grower. Fruit medium or above, cylindrical; regular surface, yellow veined, russeted; flesh yellow, firm, very fine grained, juicy; flavor sub-acid; quality rich. For dessert, cooking and market. November and December.

INGRAM—Seedling of the Rawl Janet. A very late keeping apple. Fruit medium, conical; red and striped; good quality and handsome. Good, healthy tree. Bears young and abundantly. A coming commercial variety. December to spring.

GANO (Black Ben Davis)—In describing the fruit, L. A. Goodman, secretary of the Missouri State Horticultural Society, says: "It is bright red on yellow ground (no stripes); large, oblong, tapering surface smooth, polished; dots minute; basin

DELICIOUS—Originated in central Iowa, in black prairie soil where only the most rugged, hardy trees will stand. Probably a seedling of Bellflower, which it somewhat resembles in shape, but immeasurably superior in quality, color, hardiness and bearing. Size large to very large; skin yellow, striped or almost covered with dark brilliant red; flesh tender, crisp, juicy, with an ideal, delicious flavor—very little acidity, yet not a "sweet apple." Will delight every apple lover except the very few who prefer excessive acidity. Tree a strong, upright grower, hardy and a heavy yielder.

MISSOURI PIPPIN—Large, oblong, bright red, with numerous gray dots; very handsome and of fair quality; an early and very abundant bearer and a very profitable orchard fruit; vigorous. December to March.

NORTHWESTERN GREENING—Fruit medium to large, averaging from seven to eight ounces each and very uniform in size. Color greenish yellow, flesh juicy, firm and fine grained. Very fine quality and flavor. Tree is very hardy and a thrifty grower, an early and continuous bearer. One of the longest keepers known. January to spring.

PATTEN GREENING—Duchess seedling, originated by C. G. Patten, of Iowa. Good size; flavor pleasant, sprightly, sub-acid. Superior for cooking. December to February.

PEWAUKEE—A seedling of Oldenburg. Medium to large, roundish, oblate; skin brightish yellow, striped and splashed with dark red, and overspread with whitish dots; flesh white, tender, sub-acid; quality fair; tree vigorous, extremely hardy, especially for cold and severe climates, one of the iron clads. January to May.

PRICE'S SWEET—A large, greenish yellow, flat-shaped. Apple claimed by many to be superior to Talman Sweet. Tree hardy and productive.

RAWL JANET—Tree good grower, not so large as some; fruit medium; somewhat conical, regular; surface smooth, mixed and striped on yellow and green; flesh yellowish, crisp, fine grained, juicy; flavor sub-acid; quality good to very good. For dessert, kitchen, market and cider. November to spring.

ROMAN STEM—Tree moderate grower and productive; fruit medium, globular; surface smooth, yellow, sometimes blushed; flesh yellowish white, fine grained and juicy; flavor mild sub-acid; quality very good; for table use. October to December.

ROME BEAUTY. (Gillett's Seedling.)—Large, yellow, striped with red, flesh juicy, crisp, sub-acid, tree moderate grower. October to December.

RUSSET—Medium to large, greenish or yellow russet, crisp, good sub-acid flavor, productive, very popular on account of its long keeping; vigorous. December to May.

SALOME—Fruit of medium and uniform size; quality very good; early and annual bearer. Tree a strong grower and haray.

SCOTT WINTER—Extra hardy, sour, red striped. A valuable variety, hardy; thrifty grower, bears young. Fruit medium size, roundish; surface deep red and light red in blotches and streaks. Flesh yellowish white, slightly reddened near the skin; rather acid and good in quality.

SNOW—See description of "Fameuse."

SUTTON BEAUTY—Fruit medium to large, roundish, skin waxen yellow, striped with crimson; flesh whitish, tender, sub-acid, quality very good; tree a free, handsome grower and productive; flesh tender and juicy, good color and keeps late.

TALMAN SWEET—Medium size, pale yellow, slightly tinged with red; firm, rich and sweet; excellent for preserving; tree vigorous, very hardy and productive. November to April.

WAGENER—Medium to large, deep red in the sun, flesh firm, sub-acid and excellent, very productive, bears very young. October to December.

WALBRIDGE—Medium size; handsome, pale yellow, striped with red; crisp, a late keeper; tree very vigorous, extremely hardy. January to May.

WILLOW TWIG—Large, roundish; greenish yellow, striped with dull red; flesh firm, rather coarse; pleasant sub-tart flavor; fine for cooking.

ing; highest quality. Productive. Reliable growers represent it to be hardy North.

WINE SAP—Large, roundish; deep red; medium quality; keeps well; tree a fair grower and good bearer. December to May.

WINTER BANANA—A new variety that gives promise of being a highly prized and valuable market sort. Beautiful yellow fruit; flavor exquisite and very tempting. Productive. Reliable growers represent it to be hardy North.

YORK IMPERIAL—Tree moderate grower and productive, fruit large, lop-sided; surface smooth; color mixed bright red on yellow ground; flesh yellowish, tender, juicy; flavor mild sub-acid; quality very good; for market, table, kitchen. November till spring.

CRAB APPLES

The improvements in the varieties of crab apple have kept pace with other kinds of fruit. A few years ago it was thought fit only for cider, preserves and jelly, but there are varieties now that command a good price on the market for dessert purposes; especially is this the case with the Whitney. Ornamental when in bloom and when loaded with their highly colored fruits.

They are entirely hardy, and do well in any kind of soil, in the most exposed situations.

They come into bearing very early, generally the second year, and bear every year.

They are unequaled for jelly, and can be dried, cooked, canned and preserved with the skin on, thus saving work.

BRIAR SWEET—A strong growing, fine orchard tree; an abundant bearer. Fruit pale yellow splashed with carmine; rich and sweet with little or no crab flavor. Season September.

FLORENCE—Large, handsome; crimson, splashed with darker red; prolific, valuable. September.

GENERAL GRANT—Large, roundish oblate; yellow, with stripes of deep red, and dark red, almost black on the sunny exposures; flesh white, moderately fine grained, mild, sub-acid flavor. September and October.

HYSLOP

native of high quality. Fruit very large, yellowish when fully ripe. Partakes strongly of the wild flavor. Perfectly hardy.

TRANSCENDENT—A very strong grower, making a large, beautiful tree; an early and abundant bearer, fruit large, round, skin smooth, color rich yellow, shaded with red. August and September.

WHITNEY NO. 20—Tree thrifty, upright grower; fruit large, skin smooth, striped and splashed with carmine; flesh firm, juicy, of pleasant flavor. One of the very best. August.

HYSLOP—Tree a moderate grower, making a beautiful shaped, thrifty tree; bears young; fruit large, nearly round, flattened at the ends; skin smooth, color dark rich red on yellow ground; flavor very good.

MARTHA—This is one of the best. The ground is bright yellow, nearly over-spread with light bright red. Of good size.

QUAKER BEAUTY—Tree one of the strongest growers, good bearer; quality good. October to January.

SOULARD—An improved

Pears

The pear succeeds on most soils, but does best on rather heavy loam. Budded on its own stock it makes what is called a standard tree; but on quince stock it makes a dwarf. Standards are best adapted to large, permanent orchards, but dwarfs come into bearing very much sooner and may be planted much closer together. Dwarfs must always be planted sufficiently deep to cover the quince stock two or three inches.

The soil should be rich and well cultivated. A pear orchard should not be permitted to "go to grass." They should be pruned every year, dwarfs especially. Dwarfs should have low heads and be trained in a pyramidal form, one-half of the previous season's growth being cut off each spring.

DISH OF CLAPP'S FAVORITE PEARS

Pears succeed best on rather steep hillsides. Plant Pears midway of the slope, putting something else on the upper and lower sections. Cultivate sparingly, so as to induce a very slow growth, and let blue grass take the land before the trees come into fruitage. When blight appears, cut off the affected parts at once and burn them; cut six inches below the lowest blight, to insure taking all infected sap.

GATHERING PEARS—Don't let them ripen on the trees, where they rapidly lose their flavor. Gather the early Pears as soon as the fruit readily parts from the branch, and the later varieties should be gathered two weeks before fully ripe. Ripen the fruit in the house in a dark room. Thin the fruit when the trees are heavily burdened, especially the young trees.

Choose a dry soil (clay or heavy loam is best), a sheltered situation, low-headed trees, cut back straggling shoots one-half every spring to compel dense crops, mulch well winter and summer.

Webster City, Hamilton Co., Iowa.

M. J. Wragg & Co., Des Moines, Iowa.

Gentlemen:—As I am a man who always endeavors to speak the truth in regard to anything, no matter what the result may be, I will say I am rejoicing over my seventy-five cherry and fourteen apple trees I bought of you last fall. Of the cherries I have lost only two so far and three apples, and the rest are all growing finely and could not do better. Nearly all the cherries were full of bloom buds before I clipped them off. The Wraggs are doing the best and are the most forward; the Montmorency next. I lost one of the latter and one Richmond. I advise any man to buy of you if he wants a good strong tree sure to bear.

FRANK L. RIBBEY.

BARTLETT

BARTLETT—Large size, with often a beautiful blush next to the sun; buttery, very juicy and high flavored; bears early. August and September.

CLAPP'S FAVORITE—Large, obovate, ovate; skin thin, pale yellow, marked with pale crimson and fawn colored dots; flesh white, fine grained, juicy, buttery, rich, melting and sweet. Very vigorous, upright grower. August and early September.

EARLY HARVEST—Vigorous and long lived. The fruit is large golden yellow with a fine red cheek, flavor poor, but it sells well in market because of its size and earliness in ripening.

WILDER EARLY—One of the very earliest pears. Size medium, greenish yellow, with a brownish red cheek and numerous dots; flesh white, fine grained, melting, excellent. Always find a ready sale in market. Largely grown by commercial orchardists. Tree bears good crops early and annually. D. and S.

The Hartford Pear A Valuable New Sort for Western Planting

In the Hartford Pear we have a variety that is bound to make a sensation wherever grown, for, in all our long experience as nurserymen, we have never come across a fruit of this kind which is so universally adapted to conditions in the West and Northwest. This is not based on hearsay evidence or imagination, but is an actual fact, as the original Hartford tree is still standing and is bearing bountiful crops every year, as can be seen by the following certificate of the owner of the tree.

The original tree is standing in the town of Hartford, Iowa, for which we have named it. Its trunk is 6 feet 8 inches in circumference, 30 feet high, and has a spread of 27 feet.

AUTUMN PEARS

BEURRE D'ANJOU—Large, obtuse, pyriform; dull, yellowish green, sometimes with a dull, reddish cheek; flesh whitish, juicy, melting, with a brisk perfumed flavor. Vigorous and hardy. October.

DUCHESSE D'ANGOULEME—Very large, oblong, obovate, dull greenish yellow, flesh white, very juicy, buttery, with a rich, excellent flavor. Tree a strong grower. October.

FLEMISH BEAUTY—Large, beautiful, juicy, melting, rich and fine; good bearer; one of the hardiest and does well nearly everywhere. September and October.

GARBER HYBRID—Very large, oval, narrowing at both ends; yellow as an orange; flesh whitish, juicy, sweet and very pleasant. Tree an upright grower with heavy, dark green foliage. September.

HOWELL—Large, light yellow, red-cheeked; rich and sweet. Tree upright, free grower; early and prolific. September and October.

IDAHO—A native of Idaho. Fruit golden yellow, with red cheek. Shaped more like an oblong apple than a pear. Delicious flavor. October to December.

KIEFFER—Large; golden yellow, often blushed in the sun; juicy and melting. One of the best for canning and preserving, the most profitable to grow. Tree healthy, hardy and vigorous. Does not succeed on quince, therefore no dwarfs should be planted. Kieffer receives more praise and condemnation than any other. It seems to be losing favor in some regions on account of its low quality. It is liable to overbear, therefore special pains should be taken to thin the fruit.

LINCOLN CORELESS—Practically coreless; very late. Fruit should be picked when green to escape the early frosts. Large; quality good. Good bearer, fairly hardy.

SECKEL—Small, skin rich, yellowish brown; flesh very fine grained; sweet, juicy and pleasant. Best for its size. September and October.

Plums

Iowa, the natural home of the plum, has furnished us with many choice varieties of nature's own planting along our creeks and rivers. The best of these obtained by careful selection and cultivation are today the most desirable varieties for the planters of the prairie states. They are perfectly hardy, able to stand our climate, and it is from these that we must expect our profitable crops of this fine fruit. The plum delights in a cool, not too dry situation, and good, rich soil. Plant in rows north and south with trees 10 to 15 feet apart in rows, far enough from each other to give good air circulation. The varieties we offer have been thoroughly tested, and are standbys of the West. These with the best of the Oriental plums may be relied upon to furnish yearly crops of this most highly profitable and exceedingly delicious fruit.

The only serious difficulty is that many of the best sorts are not self-fertile and though blooming abundantly, they must have the company of other varieties to enable them to mature fruit. Therefore, be sure to plant several varieties together, so that every tree has a different variety for its next door neighbor. Use Hawkeye and DeSoto for fertilizers.

DISEASES AND ENEMIES OF THE PLUM—The prevalence of the disease of the plum commonly known as the "Black Knot," which has so much discouraged people in the eastern states from giving to the plum its merited share of attention, has as yet done but little damage west of the Mississippi river, but its appearance should be guarded against, and its ravages pre-

vented by keeping the trees in healthy condition, which is done by good cultivation, and removing the Knot by amputation on its first appearance. Nothing is more favorable to the growth of the black fungus or knot than neglect. But the great enemy of the plum is the insect known as the Curculio, a small, dark brown beetle which punctures the fruit in depositing its egg from which is hatched the destructive grub, and causing the fruit to drop prematurely and rot. Two ways of destroying this Curculio and saving the crop of fruit is recommended, viz:

First. Spread a large sheet prepared for the purpose under the tree and then jar the tree so as to shake down all fruits that have been stung, as well as all the Curculios; both insect and stung fruit are destroyed. Begin to do this as soon as the blossom falls, and keep it up daily, or at least tri-weekly until the fruit is half grown. The morning is the best time to do this when the insect is chilled and stupid.

Second. The best remedy and the one generally adopted now doubtless is the spraying of the trees, directions for which is given in the last pages of this catalogue. If those who really desire to grow fine crops of this most delicious fruit will try either of these systems and follow it up rigidly they will be successful.

EUROPEAN PLUMS

BRADSHAW—Fruit very large; dark violet red; flesh yellowish green; juicy and pleasant; productive. Vigorous. Middle of August.

DEATON—Of the European type, originated in Polk county, Iowa, and has attracted considerable attention in the neighborhood. It is doing well wherever tried. The fruit is large, and its color is quite attractive, being a peculiar reddish purple. Profitable; a great bearer; in great demand. We control the whole stock and can furnish fine, healthy trees.

GERMAN PRUNE—Very large, long, oval; purple, with a thick blue bloom; flesh green, firm, sweet, pleasant and separates freely from the stone. Tree bears enormous crops, hanging late; vigorous. September.

LOMBARD—Tree vigorous, hardy and productive; fruit of medium size, roundish oval, slightly flattened at the ends; skin a delicate violet-red, paler in shade; flesh deep yellow, juicy and pleasant. August.

SHIPPER'S PRIDE—Size large; color dark purple; flesh firm and excellent. September.

SHROPSHIRE DAMSON—A plum of fine quality. The flesh is amber colored, juicy and sprightly. Very productive and a valuable market variety. Freestone. September.

TATGE—"King of All Plums"—The most productive long lived plum known. This fine hardy plum, of European strain, is from a seedling originated in Iowa. A fine grower and an early and profuse bearer. It has stood all the test winters of the past fifteen years and seems to be the most

GERMAN PRUNE

productive long lived plum known. Excellent in quality.

YELLOW EGG—Very large; egg-shaped; excellent for cooking; good and productive; vigorous. Last of August. Splendid variety for nearby market.

NATIVE PLUMS

BRITTLEWOOD—Originated with Theo. Williams, Benson, Neb., from seed of Harrison's peach pollinated with Quaker. Form oval-round; size large, cavity shallow, apex rounded; surface smooth, but not glossy; color dark red, dots numerous, small; bloom thick, grayish; skin thick, slightly astringent; flesh firm, meaty; quality good; stone large, flat, partly free; flavor sharp acid. Tree large, spreading and vigorous.

DE SOTO—Resembles Miner in form and color, but two weeks earlier. Fine for eating or canning. Tree a moderate grower; bears young and profusely; hardy north. Is best planted on moist rich ground and the fruit thinned. Use this variety for fertilizing.

FOREST GARDEN—A strong growing tree; needs a little attention to keep

tree in shape to avoid splitting and breaking of limbs. A profuse bearer and perfectly hardy; nearly round, mottled red and yellow, rich and sweet. August.

HAMMER—Large, oblong, light red, of fine quality; profusely fruitful; season late; fine for canning or market. The tree is as handsome as any plum tree that grows.

HAWKEYE—One of the best. Large, color light mottled red, superior quality, firm; carries well to market. Three hardy, thrifty; annual bearer. A splendid fertilizer. September.

MILTON—Medium size, dark red, skin thin, flesh firm, quality fair. Ripens earlier than Wild Goose. Its extreme earliness makes it valuable. A strong grower, productive.

MINER—Tree a strong vigorous grower, fruit large, and of a good quality. A valuable variety to raise in the southern part of the country. Middle to last of September.

POTTAWATTAMIE—Tree a good grower, hardy; color a yellowish red turning to bright red when fully ripe; skin thin, clear and tough. First fruit begins to ripen late in July; quality fairly good.

THE STODDARD PLUM—THE BEST, MOST PROLIFIC, HANDSOMEST PLUM FOR THE NORTHWEST.

**The best, most prolific new
plum for the Northwest.**

**Introduced by the
M. J. Wragg Nursery Co.**

The Stoddard is the largest American Plum known. At the World's Fair in Chicago, and at the Trans-Mississippi Exposition in Omaha, and at the World's Fair, St. Louis, 1904, it took first premium as the largest and finest American Plum exhibited. It is a pure Americana, but shows strong markings of the Japan

type in leaf and fruit. It originated in Iowa, and during the twenty years it has been fruited it has borne annually immense crops of the most beautiful fruit, often measuring $5\frac{1}{2}$ to 9 inches in circumference, and of the very finest quality. In color it is a deep purplish red, with bluish white bloom and numerous dots. Flesh is deep yellow, tender and juicy, with an exquisite, mild sub-acid flavor. The tree is a good, stout grower, beautiful enough for the lawn; an early bearer, and perfectly hardy. Stoddard was introduced by us in 1890, and we have had good reports from it wherever tested. We control the original stock.

EXPERT OPINIONS ABOUT THE STODDARD.

The Stoddard Plums received in good condition. They are beautifully colored, with a pleasant odor, and of better quality than either Wolf or De Soto. The skin is thin but tough; would be a good shipper, and withstand the curculio. They are the largest natives I ever saw, and I consider it a very desirable variety.—G. Klarner, Proprietor Quincy Nurseries, Illinois.

I have fruited the Stoddard Plum for three successive years, and find it very productive. In size it is the largest; while its fine quali-

ties are all that any one could desire.—G. A. Ivins, Iowa Falls, Iowa.

The Plums (Stoddard) are just at hand, in excellent condition, and I am surprised at the size, beauty and quality of them. The one thing that strikes me most is the fact that the skin is sweet, whilst in nearly all other natives it is sour or acid. This Plum will compare favorably with many of our Japanese varieties, and I am glad to have had a chance to see it.—L. H. Bailey, Cornell University, Ithaca, N. Y.

SOME GOOD WORDS FOR STODDARD PLUMS.

The Stoddard Plum trees I bought of you last spring all lived and made a good growth. The large size of this variety as grown at the Agricultural College, at Ames, and as shown from plates at the Iowa State Fair, makes me esteem the variety highly. I already have seedlings of it, grown from these prize specimens.—N. E. Hansen, Brookings, S. D.

I want to say that the Stoddard Plum is splendid. The little trees you sent me a few years ago are bending with very large fruit, and the quality is fine. I intend, this week, to bottle them, so I can show them to the trade, and will make an effort to bring them before the public. My trade has always been excellent and I expect to continue, so long as I have to buy.—G. A. Ivins, Iowa Falls, Iowa.

Is anything more needed to show the remarkable qualities of this fruit?

In the Iowa Agricultural Report for 1895 will be found the record that the Stoddard took first premium as the most promising native Plum introduced since 1885.

In the Year-Book of the United States Department of Agriculture for 1902 the Stoddard is recommended as one of the most promising new Plums, and is a valuable sort for the North and West.

SURPRISE—Grown from seed in Brown county, Minn., in 1886. Professor Crane, of Madison, Wis., says: "The very best Plum so far tested in our orchard." Fruit prune-shaped, dark red. Long keeper, therefore valuable for market. Ripe from September 1 to 10. Tree a thrifty, upright grower; hardy and productive. A fine tree in orchard.

WEAVER—Large, purple with a blue bloom, very prolific; a constant and regular bearer and of good quality. Tree very hardy. August.

WILD GOOSE—The most popular fruit with some fruit growers. Tree a vigorous, upright grower; fruit medium to large, rich golden yellow, shaded with red; flesh yellow and juicy; flavor rich and good.

WOLF—Fruit large, a perfect freestone. As to quality we find them superb for cooking and for serving with sugar as we use peaches. Tree a good grower; hardy. August.

WYANT—Large, round, oblong, wedge shape, dark red; skin thick; peels readily; flesh firm; freestone, and of excellent quality. Native of Iowa and hardy.

JAPAN PLUMS

SATSUMA (Blood)—A fine large plum, delicious for canning and a grand market sort; nearly round; the flesh is solid, of purplish crimson color from pit to skin, juicy and of fine quality; pit exceedingly small—very little larger than a cherry stone; tree a strong, vigorous grower with a brownish-red bark and lance-
lot foliage. Will keep for from one to three weeks after picking. Yields well.

WICKSON—New. A remarkably handsome, very large, deep maroon red plum.

BURBANK

ABUNDANCE—Large roundish; freestone; amber, turning to a rich cherry color with a whitish bloom; flesh light yellow, juicy, tender, sweet and excellent, vigorous and very productive August.

BURBANK—Large, nearly globular; clear cherry red with thin lilac bloom; flesh deep, yellow rich, very sweet with a peculiar and agreeable flavor. Vigorous and a very early bearer. Last of August.

Select Cherries

Cherry trees are now generally propagated by budding on Mahaleb stocks, since they do not sprout from the roots. They should be planted deep enough to place the point of union from four to six inches below the surface.

No home orchard is complete without its proportion of Cherry trees, and it is one of the most profitable market fruits and will succeed on any kind of soil that is not wet. There are four groups: Hearts, Bigarreus, Dukes and Morellos. The sweet cherries, or Heart and Bigarreau varieties, are not so much of a success in the West and Southwest as in the Eastern states, but the Dukes and Morellos succeed everywhere, especially the latter.

Cherry culture has been a success when proper attention has been given to the selection of varieties and their culture. The hardy, thrifty varieties of the Morello type may be freely planted with confidence of profitable results. The cherry tree should be planted in a naturally dry soil, or the soil should be well drained, so that water may not remain near the roots for any considerable time. The most successful varieties in general cultivation are:

HEART AND BIGARREAU CHERRIES. (Sweet).

BLACK TARTARIAN—Very large, bright, glossy black; half tender, juicy, rich and fine. Tree a rapid grower and good bearer. Last of June and first of July.

GOVERNOR WOOD—Large; light yellow and bright red; nearly tender, juicy, sweet, rich and delicious. Tree vigorous and productive. Middle to last of June.

WINDSOR—The fruit is large, flesh remarkably firm, sweet and of fine quality. Tree hardy and prolific. Middle of June.

YELLOW SPANISH—Large, pale yellow, with red cheek; flesh firm, juicy, delicious and handsome. Last of June and first of July.

SAYLOR SWEET—The only hardy sweet cherry for Iowa. See description on back cover.

Dexter, Iowa, Oct. 15, 1908.

M. J. Wragg & Co.

Dear Sirs:—At the Dexter Street Fair I made a nice showing of thirty-five plates of fruit grown from Wragg's stock. Of course, I captured the prize you offered. I made no other entries, as I had offered the other premiums. The most of the stock sold in this locality last spring has done well, except evergreens. The replace will not be heavy outside of this, and people seem to be well pleased.

W. P. NOLTE.

DUKE AND MORELLO CHERRIES (Sour).

Let Early Richmond and Montmorency make up a large part of your Cherry orchard if you want to be entirely happy. Other varieties are gradually dying out, so that in time Early Richmond and Montmorency, with some English Morello for late market, will constitute the varieties in the orchard.

These two sorts successfully resist the ailments caused by floods of rain. Professor Webster, of Ohio, reported that these two have so far been able to resist the attacks of the San Jose Scale.

COMPASS—Originated in Minnesota. Is a cross between the Morello cherry and Miner plum. Remarkably hardy and planted extensively in Minnesota and the Dakotas, where encouraging reports have been made as to hardiness and fruitfulness. Its early bearing is wonderful. One year old trees in the nursery now being covered with bloom. Many trees fruit same year they are planted. Unsurpassed in extremely cold climates for canning.

DYEHOUSE—This variety partakes both of the Morello and Duke wood and fruit. A very early and sure bearer; ripens a week before Early Richmond, is of better quality and productive. Free. May and June.

EARLY RICHMOND—Everywhere the most popular. Tree strong, thrifty grower, making a large, symmetrical head; fruit medium size, dark red, melting juicy; sprightly acid flavor and especially valuable for cooking purposes; tree an early and abundant bearer. Season last of May and first of June.

ENGLISH MORELLO—Tree moderate grower, hardy; an early and great bearer; the most valuable of the late varieties. Fruit large, round; skin dark red, becoming nearly black when fully ripe; flesh dark red, tender, juicy and of a pleasant sub-acid flavor when fully ripe. July.

WRAGG CHERRIES

THE WRAGG CHERRY

Of the English Morello type and very similar in fruit, but averages larger, a few days later in ripening, and possibly has slightly more acidity. Tree dwarfish, with spreading, round head; abundant and regular bearer; bears younger than English Morello, stronger grower; not so subject to disease. During the last twenty years has fruited finely for us.—Early August.

Old trees in this county have a record of twenty years without a failure.—M. J. Graham, Dallas County, Iowa.

Well adapted to high latitude and prairie regions of the northwest. One of the best sour varieties.—Illinois Horticultural Society.

Planted in many locations and considered a very good market sort as it is a good shipper and ripens after other cherries are gone, when there is an excellent demand.—Prof. E. E. Little, Horticulturist, Iowa State College.

Trees obtained from Mr. Wragg have borne and fruited all right; entirely satisfactory.—C. L. Watrous, Ex-President, Iowa Horticultural Society.

Montmorency is very profitable, a beautiful tree and hardy; English Morello, good; Wragg is a gem—bears young, ripens late, never failed to crop in eighteen years in Iowa. Montmorency and Wragg give the most money bud on Mahaleb and plant 16x18 feet—Major Frank Holsinger, Wyandotte County, Kansas.

The principal variety upon which we can depend for a crop the country over.—Elmer Reeves, Treasurer, Iowa Horticultural Society.

Has given a good crop the three years I have been here, some four and five year trees yielding over \$3.00 worth of fruit each.—G. F. Sheffer, Boone County, Iowa.

LARGE MONTMORENCY—(Large Montmorency). A fine, large, light red cherry of the Richmond class, but larger and more solid; a more upright grower, equally hardy and productive. Second only to Early Richmond in value. Ripens ten days later.

NORTHWEST—About as large as, and five days earlier than, Early Richmond; dark red; flesh firm. The tree closely resembles Early Richmond in size and general appearance; bears young and abundantly. Charles Downing said: "This is the most valuable cherry for the Northwest."

OSTHEIM—Tree medium size, with round, compact top like English Morello; bears early and abundantly. Fruit medium size; almost black when fully ripe; juicy, rich, almost sweet. For eating from the hand it is at the head of our list of hardy cherries. Season late.

MONTMORENCY

Select Peaches

Peach trees should be planted 16 to 18 feet apart. To secure healthy, vigorous and fruitful trees and fine fruit, the following points should be well attended to: (1) Keep the ground clean and mellow. (2) Keep the heads low, the trunk should not exceed three and one-half feet in height. (3) Give them an occasional dressing of wood ashes; soapsuds are also good. (4) Prune every spring, shortening the shoots of the previous year's growth. This keeps the head round, full and well furnished with bearing wood. Cut weak shoots back about one-half and strong ones about one-third, but see that there is left a sufficient supply of fruit buds. Sickly and superfluous shoots should be cut out clean. The fruit is borne on wood of last season's growth, hence the necessity of keeping up a good supply of vigorous annual shoots all over the tree. Young trees should be well mulched every spring.

BOKARA—Raised from seed procured in Bokara, Asia. It has been fruited in the Northwest for years and found to be one of the hardiest peaches known there. Tree has stood 28 degrees below zero with but little injury to the tips, and produced fair crops. Fruit large, yellow, with red cheek, of good quality, perfect freestone; skin tough, a fine shipper. August.

CHAMPION PEACHES

ELBERTA

ADMIRAL DEWEY—A perfect freestone, of fine size, form and color, with delicious yellow flesh that is yet firm enough to ship well. The tree is a strong, hardy, symmetrical grower and produces well. The very best early yellow freestone. July.

ALEXANDER—Large size, handsome and regular in form, with deep maroon shade, covered with the richest tint of crimson, rich and good in quality, with a vinous flavor; adheres to the stone. Last of June.

BAILEY—Good size, quality excellent, heavy bearer, ripens September 1st. By some claimed to be the surest bearer of all the peaches adapted to the Northwest. Freestone.

BANNER—Large, yellow, with crimson cheek, flesh firm, yellow, rich, excellent; keeps and ships as well as any peach on the market. In growth, early-bearing habit, productiveness and unusual hardness of wood and bud,

CRAWFORD'S EARLY

the variety is all that could be desired. Has been grown in Canada for fifteen to twenty years and found to produce good crops yearly through several seasons when all other sorts failed. The very best late market variety. October.

CRAWFORD'S EARLY—Fruit very large, oblong; skin yellow, with a fine red cheek; flesh yellow, juicy, sweet and excellent. Wonderfully productive and hardy. Freestone. Last of August.

CRAWFORD'S LATE—Fruit of the largest size; skin yellow or greenish yellow, with dull red cheek; flesh yellow; productive. One of the finest late sorts. Freestone. Last of September.

CHAMPION—Originated at NeKoma, Ill. The earliest freestone and a first-class shipper. Bears full crops when others fail. In comparison with the bountiful yield of all of the best kinds, it is of all of them the champion. Size large, flavor delicious, juicy, sweet, rich, excelling all other varieties; very handsome in appearance, creamy-white with red cheek; very hardy; season earliest.

CROSBY—Medium; rich orange yellow with blush; freestone; pit small. flesh yellow, juicy and sweet. Tree low, spreading; willowy habit of growth. Ripens before Crawford's Late.

ELBERTA—Large; yellow, with red cheek; of excellent quality; flesh yellow and melting; freestone. Middle of July.

FITZGERALD—An improved Early Crawford, being fully equal to it in size, quality and color. The tree commences bearing young, is productive and one of the hardiest. Fruit large, brilliant color, bright yellow, suffused with red; flesh deep yellow, best quality. Early September.

HEATH CLING—Large, oblong, white, slightly tinged with red in the sun. Fruit tender, rich, melting, luscious. September 15.

HILL'S CHILI—One of the most hardy varieties known. Dry, firm flesh, sweet and excellent for canning. The fruit is not large, but you will always be sure of peaches if you plant a few trees of Hill's Chili.

OLDMIXON—One of the old standard sorts. Strong, upright grower, needing heavy annual shortening. Fruit large, round, somewhat elongated. Flesh firm and of good quality. August.

SNEED—Fruit medium to large, greenish white, blush on sunny side; juicy and good. July. Not reliable North, though desirable as a very early bearer.

STUMP THE WORLD—Large, round; white skin, with red cheek; flesh white, juicy, good. Freestone. August 15.

TRIUMPH—Earliest yellow fleshed peach, with good eating and shipping qualities. Ripens with Alexander, blooms late; sure and abundant bearer; strong, vigorous grower. Fruit good size, yellow, with red and crimson cheek.

WONDERFUL—Originated in New Jersey. Very large, yellow with red cheek; flesh yellow, highly flavored and firm; bright red at the pit, which is small and parts freely from the flesh. Good keeper. October.

Apricots

If your Apricots are attacked by Curculio, apply the same treatment as given for Domestic plums. Budded on our native plum seedling stocks, they are especially hardy and desirable.

The Apricots, one of the most beautiful and delicious of fruits, ripening just between cherries and peaches, is of great value south. Plant the trees in among plums.

ALEXANDER—Russian, an immense bearer. Fruit large, oblong, yellow, flecked with red; sweet and delicious.

BUDD—Russian. Large, white with red cheek; sweet and juicy; strong grower, good bearer. Late.

CHINESE—Vigorous grower. The fruit is large, yellow with red cheek, of good quality; a freestone.

GIBB—Russian. Medium, yellow, sub-acid, rich and juicy; the best early sort.

EARLY GOLDEN—Small, pale orange; flesh orange, juicy and sweet. Tree hardy and productive. Beginning of July.

HARRIS—Origin, Geneva, N. Y. Recommended for extreme hardiness and good bearing qualities. Large, fair quality. Best market variety.

MOORPARK—One of the largest and finest apricots. Yellow, with red cheek. Flesh orange, sweet, juicy and rich; parts from the stone. Very productive.

BUDD APRICOT

Quinces

One of the most profitable and attractive market fruits. In places where the right conditions of soil and climate are met, it succeeds well. It wants mellow, well-enriched soil and plenty of moisture. One of the best modes of cultivation for the Quince is given as follows:

Late in the autumn give the soil a top dressing of potash, or wood ashes, which is the best, though slacked lime or cow manure will do. Sprinkle some salt over the ground and then cover with a heavy mulching of straw or litter, say six or eight inches thick, to prevent the roots from severe freezing, and in the spring remove the mulching, placing it in piles near the trees, and cultivate the soil thoroughly until about the last of June or first of July, at which time replace the mulching, which should again be removed in October and replaced about one month later after the ground has been top dressed as above directed, and continued in this way from year to year.

CHAMPION—Fruit large, fair and handsome. Tree bears abundantly while young. Flesh cooks as tender as an apple and without hard spots or cores; flavor delicate. The most valuable of all.

MAMMOTH (Rea's Mammoth)—A very large, fine variety of the Orange type. Strong grower and productive. Brought into notice near Kansas City, Mo. Probably the best of all Quinces.

MEECH PROLIFIC—The most profitable of all known varieties. Ripens between the Orange and the Champion. Bears early, quality good, and size large.

ORANGE—Large, roundish; yellow; cooks tender and is of excellent flavor. Valuable for preserves and flavoring. Productive. September.

CHAMPION QUINCE

Mulberries

The mulberry is not only valuable as an ornamental shade tree, but the fruit is well worthy of a place in every collection. Plant in deep, rich sandy loam. The tree requires little or no pruning and is of easy culture.

DOWNING'S EVERBEARING—This very delicious variety originated from the seed of the *Morus Multicaulis*, having the strong, vigorous habits of that species and produces a large fruit of a dark, purplish black color; flesh juicy, rich, sprightly, delicious. Very productive and ripening its fruit in succession for a long time. Not hardy north.

NEW AMERICAN—Largest fruit, black; delicious flavor; a very attractive lawn tree, with very large leaves. Of rapid growth. Hardy.

RUSSIAN—Good shade and ornamental tree, growing freely and symmetrically, holding its leaves late in the fall. Very rapid grower, excellent wind and snow break; bears early and constantly. Color of fruit varies some, generally black; most valuable to supply the native birds, thus keeping them from the more precious fruits.

Select Grapes

Almost everyone can find room for from six to a dozen or more grape vines. They can be trained up the side of any building or over a garden fence, but the best and cheapest way to grow them either in large or small quantities, is on a wire trellis. Work the ground deep for grape vines and plant a little deeper than they were in the nursery. Make the rows eight feet apart and plant vines six to eight feet apart in the rows. Some of the tender varieties would be benefited by laying the vines flat on the ground during the winter, with a light covering of earth or litter.

PRUNING—Annual and careful pruning is essential to the production of good grapes. The roots cannot bring to maturity a fine crop of fruit if they are called upon to carry too much wood. Late in the fall is the best time to prune, when the vines are dormant.

RED GRAPES

BRIGHTON (Red)

AGAWAM—Bunch large, shouldered; berry large, round, reddish brown, tender, vinous and of excellent flavor. Very vigorous and productive. Vine hardy and one of the best of its class.

BRIGHTON—Bunch large, shouldered; berries medium to large, round, dark red, tender, very little pulp, sweet, juicy, slightly aromatic and very good. Ripens early.

DELAWARE—The bunches are small, compact, and sometimes shouldered; berries are small with thin but firm skin; flesh juicy, very sweet and refreshing and of the best quality for both table use and for wine. Ripens with Concord or a little before; vine is hardy, productive and a moderate grower.

WOODRUFF—A handsome, profitable market sort; vine vigorous, productive; iron-clad constitution. Bunch and berry large, attractive, ripens early; fair quality, long keeper, good shipper. In most sections the best red market grape for main crop.

About five or six years ago I bought some trees of you, both apple and plum. The apple trees are just beginning to come into bearing and the plum trees have borne last year and this. I have always been well pleased with the stock received from you. It nearly all grew and now is a credit to any nursery.—Rev. C. Artman, Luverne, Iowa.

BLACK GRAPES

CAMPBELL'S EARLY—A new, very large and fine early grape, black. Strong, vigorous, hardy vine with thick, healthy leaves; clusters very large, usually shouldered, compact and handsome; berries large, nearly round, black, rich, sweet, very good; skin thin; seeds few and small, parting easily from the pulp; a good shipper. Ripens very early, but remain sound on the vines for many weeks. This makes it one of the most satisfactory and profitable market sorts to grow.

CHAMPION—Bunches large and compact; berries large, covered with a rich bloom; poor in quality; vine a strong and healthy grower and a good bearer; profitable for market on account of its earliness.

CONCORD—One of the most popular and reliable varieties we possess; bunch large, compact and shouldered; berry large, round, almost black with blue bloom, juicy, buttery and very sweet.

CAMPBELL'S EARLY

MOORE'S EARLY—A large grape, ripening a week earlier than Concord; good grower; berries large, good quality, and makes a moderate yield; very valuable as an early grape.

VERGENNES—Berries large, holding firmly to the stem; light amber, rich and delicious. Is an excellent late keeper.

WORDEN—Seedling of the Concord, which it greatly resembles in appearance and flavor, but the berries are larger. The fruit is said to be better flavored and to ripen several days earlier. These qualities will give it the foremost rank among native grapes.

Paper bags slipped over the clusters as soon as they have formed are a good protection from fungus, insects and birds.

To destroy the grape curculio pest, spray with London purple as soon as fruit is set.

The borer manifests itself by the unhealthy appearance of the vine. Search at the roots and destroy the grub.

MOORE'S EARLY (Black)

M. J. Wragg & Co.

Gentlemen:—In 1895 I bought of your agent a bill of fruit trees. Amongst them were six Wragg cherries on their own roots. The first season they had probably one dozen cherries on each tree, and they have never missed a crop since I put them out. This last season I sold off the six little trees \$10 worth of fruit after my wife had put up what she wanted. The beauty of it is you can stand on the ground and pick nine-tenths of them, and on a chair pick the balance. More remarks have been made about them than all the fruit I have on my place.

Yours very truly,

Rose Hill, Iowa.

G. W. STOUT.

WHITE GRAPES

NIAGARA (White)

POCKLINGTON—Seedling from the Concord. The vine is thoroughly hardy both in wood and foliage; it is a strong grower, never mildews in vine or foliage. This is called a white grape, but the fruit is a light golden yellow, clear, juicy and sweet to the center, with little or no pulp; bunches very large, sometimes shouldered; berries round, very large and thickly set; quality very fine. Ripens with the Concord.

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

MOORE'S DIAMOND—The leading, early white grape, ripening before Moore's Early. white, with a thin bloom; flesh juicy, few seeds, almost free from pulp, excellent quality; above medium size, adheres firmly to stem. Very like Concord in growth, hardiness and foliage. Fine variety for both market and home garden.

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

Raspberries

in this way they will need no stakes, but will be stout enough to support themselves.

The great improvement in the hardy varieties makes the cultivation of this fine fruit comparatively easy; any good soil will do, but a light, loamy one is preferable. Plant in rows five or six feet apart, leaving four feet between the plants; remove the old canes as soon as the fruit is gone, and do not allow more than three or four new ones to each hill; pinch the young canes when three or four feet high, and continue pinching in the laterals when a few inches long. Treated

RED RASPBERRIES

CARDINAL—New; originated in Kansas; heavy grower, hardy; berries firm and of excellent quality; very productive.

CUTHBERT—Cane tall and vigorous, berries large, conical, rich crimson and very handsome; best quality and carries well; very productive.

LOUDON—From Wisconsin. Plants hardier and more vigorous than Cuthbert; begins to ripen with the Cuthbert, and continues longer. Berries larger, firmer, and of brighter color; clings to the stem and never crumbles. A fine shipper and good market berry; very productive and of fine quality.

KING—One of the best of our early Raspberries. The fruits are large, bright red and of splendid flavor. One of the finest for shipping. In hardiness, growth and productiveness it takes first rank.

THE NEW "IOWA" RASPBERRY—This new Raspberry was discovered near Storm Lake, Iowa, and was named by M. J. Wragg the "Iowa," because it seemed in its sturdy strength and great productiveness worthy of the proud name. It is perfectly hardy, standing well the extremes of both summer and winter. The plant is rather dwarf, with remarkably strong canes, absolutely thornless and with a rich, dark green, heavy leaf. The plants are easily held in hedge-row form and present a neat, trim appearance. Flowers and green and ripe fruit are found on the plant through an exceptionally long season. The plants commenced bearing very early in the season, having produced the first ripe fruit on our grounds out of nearly twenty varieties, and produced the heaviest crop we ever gathered from the same number of plants. It is a remarkably heavy yielder. The fruit is very large, rich, dark red in color and of excellent quality. Everyone who tested this berries. For home use and near markets this variety will easily become the leader on account of its hardiness, wonderful yields and excellent quality. In introducing this variety, we are perfectly willing to let it stand on its merits, confident of the success it will achieve and the entire satisfaction it will give the planters.

Osgood, Iowa.

M. J. Wragg & Co., Des Moines, Iowa.

I would like your catalogue and price-list. I got a lot of your trees last spring and they did splendidly. I lost only two plum trees and four evergreens.

J. H. MILLEA.

IOWA RASPBERRIES

CUMBERLAND

MARLBORO—A profitable early market berry, with large, light crimson fruits of good quality and firmness. Very hardy and well suited to the North.

SHAFFER COLLOSAL—Fruit large, purple, rather soft, with sprightly sub-acid flavor. A very strong grower. Medium to late.

YELLOW RASPBERRIES

GOLDEN QUEEN—Large, beautiful translucent amber color and exceptionally firm; very productive. The canes are of the strongest growth and quite hardy.

LOGANBERRY

Hybrid between a blackberry and red raspberry, produced in California. Fruit as large as a blackberry, but of deep red color. Of questionable hardiness and utility. Excellent as a novelty.

BLACK RASPBERRIES

Pinch back blackcaps early, or when the young canes are about 3 feet high, to keep the bushes snug and compact, and to avoid staking. Clean mellow culture is beneficial to both varieties of Raspberries, and mulching, both in summer and winter, is of decided benefit to them.

This class of Raspberries, rooting at tips, should be planted very shallow. The bud in the cluster of rootlets should be placed upward, and only 1 or 2 inches below the surface. Pay no attention to the pieces of old cane left to handle them by. Thousands of plants are smothered by too deep planting.

CUMBERLAND ("The Business Black-Cap.")—Largest raspberry known, fruit frequently seven-eighths to fifteen-sixteenths of an inch in diameter. Its immense size, firmness, and great productiveness entitles it to above designation; unusually strong grower, throwing up stout stock canes; perfectly hardy. Is by far the most profitable raspberry grown for both home and market use.

GREGG—This is the extra big, late blue-black fellow. Heavy growing canes that branch out sparingly; hardy; productive of very large, firm black berries, covered with a deep bloom. Late ripening and good quality makes it a general favorite.

KANSAS—Originated at Lawrence, Kan. Healthy, vigorous grower; early; berry as large as Gregg and as good a shipper. Very productive, and valuable for early market.

STRAWBERRY-RASPBERRY—One of the recent introductions from Japan. Seemingly a hybrid between strawberry and raspberry. Bush dies to the ground in the fall. Fruit red, in size and shape like a strawberry. In northern states it should not be planted for the fruit, but as a novelty, if at all.

MAMMOTH CLUSTER—A large and very productive variety of black cap. Quality good; ripens before the Gregg.

NEMAHA—Originated in Nemaha county, Neb. Seedling of Gregg; very similar to it, but later and of better quality; stands more upright. A good sort for our dry prairie regions.

OLDER—Originated in Iowa ten years ago and has stood all our severest winters well. Coal black, as large as Gregg and five days earlier. From its size, quality, hardiness and great productiveness it promises to head the list when better known.

PALMER—A new early black cap variety; ripens its fruit just before the Gregg, but ripens it in shorter time. Good quality; vine is a strong grower and one of iron clad firmness.

KANSAS RASPBERRY

Blackberries

SNYDER BLACKBERRIES

Any moderately rich soil will answer for their cultivation, but to avoid a too strong growth and straggling habit the ends of the shoots must be occasionally pinched in during the growing season, thereby encouraging the plants to form dwarf bushes, making it easier to work among them, and at the same time causing the plants to produce a larger crop and finer berries. An annual dressing with manure will produce an excellent effect on the succeeding crop of fruit.

ANCIENT BRITON—One of the best hardy varieties. Very vigorous, healthy, hardy; loaded with good-sized berries of fine quality, carry well to and fetch highest price in market. For general planting in sections subject to severe winters, the Ancient Briton is a first-class variety.

ERIE (Uncle Tom)—It is the most vigorous and healthy plant of any blackberry we have ever grown and thus far absolutely hardy. Very productive of berries of the largest size, coal black, firm and solid. Fine form and ripensearly.

Fruit, flowers and laughter bring sunshine and contentment.

EARLY HARVEST—This is one of the earliest blackberries, but needs winter protection. Fruit medium size, quality good and prolific bearer.

MERSEREAU—Originated in northwestern New York. Renowned for hardiness of cane, great productiveness and large size berry. Is not "seedy" like many other sorts. Fruit jet black, and does not change color. Berries rich, melting and luscious, with little or no core. It has a record of yielding 12,000 per acre.

RATHBUN BLACKBERRY

RATHBUN—This new blackberry has been tested over a wide area and is said to surpass any blackberry on the market. Berries large, jet black and of very fine quality. Ripens early.

SNYDER—The old standard. Very hardy, consequently much raised in cold climates. Berries medium size, juicy, rich; strong, stout cane; thrifty growth and a very broad leaf.

STONE'S HARDY—Is claimed to be even hardier than Snyder. It is a vigorous grower; berries glossy black and of a good flavor. About eight days later than Snyder and lasts two weeks.

Dewberry

LUCRETIA—Fruit very large, luscious and handsome; perfectly hardy, a strong grower and enormously productive; a superb and very profitable market fruit; the vines should be allowed to remain on the ground during the winter and staked up early in the spring.

DWARF JUNE BERRY

Fruit borne in clusters. Reddish purple, changing to bluish black. Excellent for canning. The fruit is eagerly devoured by birds, which leave the finest fruits untouched where this is plentiful.

Currants

Currants should be planted four feet apart in the garden. The currant flourishes in almost any kind of soil, but to have the fruit in perfection plant in rich, deep soil, and give good annual pruning and cultivation. When plants are grown as bushes the older and feebler suckers should be cut out. When grown in a form of a tree with a single stem, the bearing wood should be thinned and the stem and roots kept free of suckers.

BLACK NAPLES—Very large, black, rich, tender and excellent for jellies and wine. Very productive.

CHERRY—The largest of all red currants; berries sometimes more than one-half inch in diameter; bunches short; plant very vigorous and productive when grown on good soil and well cultivated.

FAY'S PROLIFIC—For size, beauty and productiveness the most remarkable red currant ever grown. The berry is fully equal to cherry currant, while the flavor is much superior. The stem is double the length on an average, and the fruit hangs on well, never dropping, as in other currants.

HOLLAND—A very strong grower; canes stout and capable of holding up the enormous crop it always bears. It is quite late, thus prolonging the season.

LA VERSAILLAISE—Resembles the Cherry; large; of great beauty and productiveness.

NORTH STAR—New seedling; very vigorous; perfectly hardy; bunches long and well filled with fruit.

PERFECTION—In color it is a beautiful bright red, and of a size larger than the Fay; the clusters average longer and the size of the berries is maintained to the end of the bunch. It is one of the most productive Currants we have ever known, and in quality it is superior to anything in the market, being of a rich, mild, subacid flavor and having plenty of pulp with few seeds.

POMONA—This is one of the most profitable currants for the market; while not the largest in size, it out-yields all other varieties. Color is a beautiful bright red, berry sweet and less acid than most of the general varieties; good size, and larger than Victoria; a vigorous grower with healthy, hardy foliage.

RED DUTCH—Old, well-known sort of good quality; great bearer. Fine market variety. Vigorous and upright grower.

WHITE DUTCH—White; medium size; vigorous grower and good bearer; bunches very compact; early. Fruit requires less sugar than some others; excellent for jellies.

VICTORIA—Very large; bright red; bunches very long; late; very productive and valuable. This is a standard, good and reliable currant.

WHITE GRAPE—Very large, yellowish white; sweet, or very mild acid; excellent for the table. The finest of the whitesorts, very productive.

PERFECTION CURRANT

Gooseberries

The gooseberry delights in a deep, exceedingly rich soil, as recommended for currants, and thorough mulching. Gooseberries have never received the attention they deserve. The markets are scarcely ever fully supplied. Each year the demand is greater and no one will make a mistake in planting quite liberally of this most healthful, invigorating fruit.

DOWNING—Fruit very large, flesh whitish green, soft, juicy and good; plant vigorous and prolific; one of the best.

HOUGHTON—The old, well-known sort; pale red, sweet and good. It is rather small, but a productive, healthy and very reliable gooseberry.

INDUSTRY—Very large; dark red, hairy, of delicious quality. In a cool, rich soil with a northern exposure it will yield an abundance of large, luscious fruit. Under favorable conditions its immense crops and exemption from mildew will repay the attention it requires. Not an ironclad. English sort.

INDUSTRY GOOSEBERRIES

HOUGHTON GOOSEBERRIES

SMITH'S IMPROVED—Much like Downing; strong grower; large berry; productive only under high cultivation.

DOWNING (Reduced)

PEARL—A cross between Houghton and one of the large English varieties. It is very hardy and entirely free from mildew; superior in size and quality; more productive than Downing, and is likely to supersede this standard sort.

Strawberries

Strawberries will succeed in any soil that is adapted to any ordinary farm or garden crops. Soil should be thoroughly prepared to a good depth, well drained and enriched. For field culture set in rows three or three and one-half feet apart, fifteen to eighteen inches in rows; for garden fif-

teen to eighteen inches each way, leaving pathway every third row. 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. Do not cover them until ground is frozen, or so deep as to smother the plants, and remove covering before growth starts in the spring. When the berries are

IMPERFECT

set discontinue cultivation and mulch lightly which will keep the fruit clean and the soil in good condition during the fruiting season. The blossoms of all varieties marked "S" are bi-sexual or perfect, those marked "P" are destitute of stamens and are termed pistillate or imperfect, as are shown in the accompanying figures. Imperfect varieties should have a row of perfect flowered sorts planted every third or fourth row

PERFECT

to pollinize their blossoms. When imperfect blossoms are properly fertilized they are the most prolific.

BEDERWOOD. (S)—This is one of the best standard varieties for market. It is early, a very strong yielder and continues a long time in bearing. A very strong staminate, the very best fertilizer for Warfield, Crescent or Haverland.

BRANDYWINE (S).—A fine, large, late, handsome, productive berry of excellent quality, regular conical form; dark glossy red, extending to the center.

WM. BELT.

PARKER EARLE

CRESCENT

Plant healthy and vigorous, abundant producer. An extra good sort for all purposes.

BUBACH NO. 5. (P)—Very prolific, of excellent flavor and in size "simply immense." Berries all average large. A number of new varieties have been pitted against it, claiming superiority in one way or another, but we predict the Bubach will come out first best, and continue to grow in favor.

CLYDE. (S)—A healthy, vigorous grower and very productive. Fruit large, bright red, good quality. As far as tested is giving the best of satisfaction.

CRESCENT. (P)—This is an old and reliable sort. It is especially adapted for sandy soil, as it is a great plant producer and on rich loam makes an overcrowded, matted row. Good.

HAVERLAND. (P)—Profitable by reason of its productiveness and earliness; requires deep, heavy soil; plant exceedingly vigorous and healthy; fruit large, handsome and good, rather long in shape and of a bright, glossy crimson; early.

JESSIE. (S)—The plant is a stout luxuriant grower; foliage light green; large, and clean; it is a beautiful color, fine quality, good form, quite firm.

PARKER EARLE. (S)—This variety should be planted on rich soil. Should be grown in hills. Give it the best of cultivation and the crop will astonish you, but it will prove a failure, if planted on thin soil or matted rows. It sets so many berries it cannot mature them on poor soil.

ROUGH RIDER. (S)—Perfect blossom, very productive, extremely vigorous, very large and attractive; one of the firmest, latest, best keepers, of finest flavor, sells at high prices. Berries very large, irregular in shape, dark colored. Promises to take its place as the very best late market variety.

BUBACH STRAWBERRIES

ROUGH RIDER

HAVERLAND

SENATOR DUNLAP STRAWBERRIES

SAMPLE. (P)—One of the very best berries and seems to succeed nearly everywhere. Plants strong, large and healthy, producing in profusion large dark colored berries of uniform size and color, firm enough to ship well. One of the standard sorts for both home and market.

SENATOR DUNLAP. (S)—This berry is of the Warfield type, has a perfect blossom, is hardy, productive, a splendid keeper and able to hold its own under any "rough and tumble" methods of culture to which it is likely to be subjected. Is a very heavy bearer of good size, even fruit, of a very beautiful dark red color. It is a berry to grow for either home use or market.

WARFIELD (P)—There is probably no better or more profitable berry grown for market. It is in greater demand than any other berry for canning purposes, which also creates a good market for it. Care should be taken to use the right berries as fertilizers. It needs a strong pollinizer.

WM. BELT. (S)—The plant is very large, a most luxuriant grower, and remarkably productive. Its blossoms are perfect and it seems that each one is followed by a berry. It is medium in ripening; its size is very large. In form it is conical, rather long, quite uniform in shape, except that the first berry on a fruit stalk is sometimes misshapen, especially with high culture. The color is a bright glossy red. It ripens all over without green tips. The quality is fine. It is a fine grower of large, well developed berries of excellent quality.

RHUBARB

This deserves to be ranked among the best early fruits in the garden. It affords the earliest material for pies and tarts, continues long in use, is valuable for canning. Use well grown roots, not divided old clumps.

LINNAEUS—Large, early, tender and fine.

VICTORIA—Very large, long stocks; a great market sort.

ASPARAGUS

The first garden vegetable of spring; it is a great delicacy and comes in just when it is most needed. One hundred roots will supply a small family and will last for years. Set the plants about eighteen inches apart in the row. Spread the roots out in the bottom of the hole or furrow and gradually fill in as the plant grows, so that the roots will be about four inches deep.

CONOVER'S COLLOSAL—Best for general planting.

PALMETTO—Newer variety, earlier; probably as good.

GROUP OF ROSES

Roses

Long before history began the rose was loved, as now, for its beauty and fragrance. No home is truly a home without at least a few of these charming plants. Roses love a clayey soil and an open, airy situation, but will do well in any good soil. They well repay good treatment. Feeble, sod-bound plants cannot give free bloom. Mulch well with manure. All roses in this climate are benefited by being laid down and covered in winter.

The Moss roses are strong growers and perfectly hardy; they remain in bloom a long time and are especially prized for their beautiful mossy buds.

Mosses

BLUSH MOSS—Very mossy; fine buds; free bloomer.

CAPTAIN JOHN INGRAM—Dark velvety purple; foliage small, very handsome.

COMTESSE DE MURIN-AIS—The finest double white Moss rose, large, beautifully mossed.

SALET—Clear rose color, very double, of vigorous growth and abundant bloom. Perpetual.

Hybrid Perpetuals

These are hybrids or crosses between June and Monthly roses, partaking of the hardiness of one parent and the perpetual blooming habit of the other. They are by far the most popular family of roses, needing good soil and culture, as they can only bloom on new shoots of the current season. Free manuring after the first crop will insure better blooms later in the season.

ALFRED COLOMB—Bright carmine red; clear color; large, deeply built form; exceedingly fine.

ANNE DE DIESBACH (Glory of Paris)—Brilliant carmine pink. A superb garden sort; fragrant, one of the hardiest and best.

BARONNE DE BONSTETTIN—Rich, dark red, passing to velvety maroon, highly fragrant; very double.

COQUETTE DES ALPS—One of the finest pure white hybrid perpetuals; large, full, finely formed flower; pure white sometimes faintly tinged with pale blush; profuse bloomer.

COQUETTE DES BLANCHES—Flowers of medium size in large clusters, full and slightly fragrant. Snowy white, sometimes delicately flushed with pale rose.

GENERAL JACQUEMINOT—This might be called the rose for the million, for it is still a universal favorite. Bright crimson-scarlet, exceedingly rich and velvety.

GENERAL WASHINGTON—Color brilliant crimson; very rich and beautiful; large, perfectly double and a free bloomer.

JOHN HOPPER—Bright rose with a carmine center, large and full.

MADAM CHARLES WOOD—Flowers large; dazzling crimson; a constant bloomer; very fine.

MADAM GABRIEL LUIZET—Pink; very large and fragrant. As an exhibition rose it stands at the head of the list.

MAGNA CHARTA—Bright, clear pink, flushed with violet crimson, flowers large, fine form, sweet, very double and free bloomer.

MRS. JOHN LAING—Deep rose; large, fine form, fragrant, vigorous grower and hardy. One of the most profuse bloomers.

MARSHALL P. WILDER—New; color cherry carmine; continues in bloom long after others are out of flower; exquisite.

PAUL NEYRON—Deep rose color, good foliage; by far the largest variety in cultivation; one of the best.

PRINCE CAMILLE DE ROHAN—Very dark, rich velvety crimson, passing to intense maroon, shaded black; large full flowers. One of the darkest roses and very handsome.

Climbing Roses

QUEEN OF THE PRAIRIE—Bright rose in clusters, vigorous, very free bloomer.

SEVEN SISTERS—Fine, free bloomer, bright scarlet; claimed by some to be hardier than Prairie Queen.

Miscellaneous Hardy Roses

In this collection we have grouped the best of the summer roses, they are hardy, requiring no protection, and thrive in exposed situations where most roses will not grow. Nearly all of them make beautiful hedges and are frequently used for this purpose. They require but little pruning, as most of their flowers are borne on the old wood.

TREE ROSES.

Tree Roses are growing more popular every day, and deservedly so, for they combine a stately dignity with the artistic freedom of the Rose bush in a manner all their own. The Crimson Rambler in tree form is unique and beautiful, and where one has not the space to grow the climbing form of this Rose, it is particularly valuable. We have a splendid stock of this variety. We have also an extra-selected stock of Hardy Hybrid Perpetual Roses in tree form in red, white and yellow.

PERSIAN YELLOW—Similar to above, but with flowers fuller and of better form. Bright yellow; the most double of this class. The finest hardy yellow rose.

MADAM PLANTIER—Flowers pure white of medium size; full; somewhat rosy in the bud form; produced in greatest abundance quite early in the season. The leaves are small; the bush hardy and spreading. Fine for masses, hedges, borders, cemeteries, etc.

HARRISON'S YELLOW—This variety blooms early, making a brave show with its bright yellow flowers. It has small faintly fragrant leaves and very thorny stems. In this variety the flowers are of medium size, semi-double, rich golden yellow, and produced very freely.

about as large as a twenty-five cent piece. Blooms middle of June in immense clusters.

YELLOW RAMBLER—Bud beautiful bright yellow, opening straw color fading to a beautiful creamy white. Blooms middle of June. Not so desirable as the crimson.

WHITE RAMBLER—Pure snowy white, flowers are double. Blooms middle of June. Not very satisfactory.

Ramblers

CRIMSON RAMBLER—Nothing equals this as an all round hardy garden rose, on account of its brilliant color, profusion of bloom and length of time the flowers last. It may be used as a climber, or can be grown in a large bush form. It blooms in large clusters of 50 to 100 flowers in a cluster, covering the foliage its entire length with a solid mass of the most beautiful perfectly shaped miniature crimson blossoms. Blooms last of June and remains in flower longer than any other hardy out-door rose.

DOROTHY PERKINS—This is a splendid new, shell-pink climbing rose. This new rose is of the same strong habit of growth as Crimson Rambler, and the flowers are borne in clusters of thirty and forty and sometimes even fifty to sixty. The flowers are large for a rose of this class. Very double, sweetly scented and fine.

PINK RAMBLER—A lovely climbing rose. Flowers light, delicate pink or blush and

Ornamental Shrubs

The planting of ornamental shrubs is very largely on the increase, and this is as it should be, for with a good selection the lawn can always be beautiful. They are mostly of medium size, enabling one to plant a great variety on a small plat, and the wonderful assortment of foliage from the darkest green and purple to light orange and silver tints. This addition to the great variety in the blossoms, all unite to keep up a never failing interest. We have selected the very best for our climate.

FLOWERING SHRUBS—Variegated or Colored Foliage—Berberry, Golden Elder, Syringa Variegated, Weigelia.

Shrubs that Flower in May—Flowering Almonds, Honeysuckle, Japan Quince, Lilac, Snowballs, Spireas, Wisteria.

In June—Clematis, Deutzia, Elder, Honeysuckle, Paeonias, Lilacs, Snowball, Spireas, Syringia, Weigelia, Wisteria.

In July—Clematis, Spirea, Honeysuckle.

In August and September—Bignonia, Clematis, Honeysuckle, Hydrangea.

ALTHEA, or ROSE OF SHARON—Valuable because they bloom so profusely in late summer when other flowers are scarce. They form beautiful

groups or hedges, their variety of colors making it possible to use quantities of them even in small grounds.

ACACIA ROSE—This is one of the finest old shrubs in cultivation, perfectly hardy and an absolute blaze of beauty when in bloom.

ALMOND, FLOWERING—Pink and white varieties. These beautiful shrubs are desirable and scarce. Hardy.

CALYCANTHUS (Carolina Allspice)—A well known native bush bearing very double, purple fragrant flowers.

DEUTZIA—A very desirable shrub, of strong, hardy growth, bearing an abundance of beautiful racemes of double, pure white flowers.

ELDER GOLDEN—The leaves are a bright and constant golden color; the flower cluster pure white. Valuable for contrasts and for massing.

HONEYSUCKLE, UPRIGHT—White and pink flowers which contrast beautifully with the foliage. Blossoms in June.

HYDRANGEA PANICULATA GRANDIFLORA—These plants are absolutely hardy, grow in any soil and bloom the same year they are set out. They flower abundantly, bearing hundreds of immense panicles of bloom. White turning to

VAN HOUTEI SPIREA

rose in autumn. An annual shortening of branches tends to increase the size of the flowers. Very fine and valuable for cemetery planting.

LILAC (Common Purple)—Bluish purple flowers, well known.

LILAC (Common White)—Cream white flowers.

LILAC (Persian Purple)—Of more slender growth and finer foliage than the common lilac. Flowers purple in large loose panicles.

SNOWBALL (Common)—A popular shrub. Makes a large bush. Bears balls of pure white flowers in June.

SPIREAS—Decidedly the best and hardiest family of shrubs for the Northwest. Many beautiful varieties of different colors and times of flowering, from May to September. Of easiest culture; should be planted everywhere.

S. AUREA—Golden leaf Spirea, with white blooms and golden foliage; very showy.

S. BALLARDII—Blossoms in beautiful rose colored spikes from early summer till frost. Hardy and very desirable.

S. VAN HOUTEI—Graceful, with long drooping sprays, thickly studded with handsome, pure white flowers; hence its popular name, "Bridal Wreath." The finest Spirea of them all.

FORSYTHIA.

Although not extensively planted, the Forsythias are worthy of attention. They make shrubs of about 6 to 8 feet in height. Very beautiful.

Viridissima. An elegant, hardy shrub. Bark and foliage a dark green color. Beautiful yellow flowers. Blooms in May before the leaves appear.

Fortunei. Growth upright; foliage deep green; flowers bright yellow. One of the best early-flowering shrubs, the flowers appearing before the leaves. Very hardy.

HONEYSUCKLE TREE.

A fine shrub, loaded with pink flowers in early spring; also makes a fine plant for hedges.

S. COLLOSA ROSEA—Flowers from June to September; of a pretty dwarfish habit; bloom rose color.

SYRINGA (Mock Orange)—Beautiful, tall, vigorous, hardy, with profuse, white orange-like flowers in May. Very popular.

TREE CRANBERRY—Resembles the snowball in wood and foliage. Its acid fruit is highly esteemed.

WEIGELIA ROSEA—Hardy, with profuse rosy, trumpet shaped flowers in May. The most superb shrub of the season.

Hardy Climbing Vines

Ornamentals of this class are so hardy and so beautiful that they deserve greater attention than they receive. No artist can produce pictures equal to the wealth of beauty displayed by the elegant Wisteria, the graceful Honeysuckle, or the charming and magnificent Clematis when in the glory of full bloom and there is nothing in art that will in any way compare with the gorgeous hues of the Ampelopsis after it assumes its brilliant autumnal tints.

AMPELOPSIS (American Ivy or Virginia Creeper, also called Woodbine)—A very rapid grower, having beautiful dark green foliage, assumes rich crimson hues in autumn.

AMPELOPSIS (Veitchii or Boston Ivy)—Leaves a little smaller and more ivy like in form than the foregoing. Overlapping each other they form a dense sheet of green. The plant requires a little protection the first winter until it is established.

BIGNONIA (Scarlet Trumpet Flower)—A splendid climber, vigorous and hardy, with clusters of large trumpet-shaped scarlet flowers in August.

CLEMATIS—The different varieties and species of Clematis now in cultivation are of the highest beauty and utility. They vary greatly in their foliage and flowers and are adapted to various uses.

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

BOSTON IVY

Hardy Herbaceous Flowering Plants

The following collection embraces the most desirable varieties. They are all showy and beautiful plants of easy cultivation, producing a continuous show of flowers in succession from May to November. They are truly the busy man's flowers, requiring but little time, and for ornamental uses, about the garden and lawns, are entitled to great consideration. This class of plants is benefited by a mulch in winter.

ASTER.

COCCINEA—A tall, leafy perennial, blooming in the fall, when flowers are scarce. Flowers purple.

CONVALLARIA (Lily-of-the-Valley).

MAJALIS—A lovely, hardy little perennial, widely planted everywhere for its delicate sprays of drooping white bells and their delightful fragrance. The leaves are a rich dark green; the plant vigorous.

DELPHINIUM (Larkspur).

FORMOSUM—A strong, robust perennial, 2 to 3 feet high; flowers in abundance; deep azure, with white center. June and July. If the flower-stalks are cut down immediately after the first blooming, another crop can be obtained in autumn.

DICENTRA (Bleeding Heart).

SPECTABILIS—One of the daintiest and most beautiful of the early-flowering perennials. Grows 1 to 2 feet high and bears its heart-shaped, rosy flowers in a simple raceme. One of the choicest memories of old-fashioned gardens.

EULALIA.

ZEBRINA—This is one of the most striking and distinct plants in cultivation. Unlike most plants with variegated foliage, the striping or marking is across the leaves instead of longitudinally, the leaves being striped every 2 or 3 inches by a band of yellow $\frac{1}{2}$ inch wide. Late in the fall it is covered with flower-spikes that resemble ostrich plumes in shape, which, when cut and dried, make handsome ornaments for the house in winter. It is perfectly hardy, and when once planted, will increase in beauty from year to year.

FUNKIA (PLANTAIN LILY).

CAERULLA—Blue; broad green leaves.

ALBA—Pure white, lily-shaped, fragrant flowers, borne in large clusters.

GYPSOPHILA.

PANICULATA (Baby's Breath)—Most graceful in effect, with mist-like white flowers that are popular for cutting, as they give an air of grace and harmony to any arrangement.

HEMEROCALLIS.

FLAVA (Yellow Day-Lily)—A most useful and desirable herbaceous plant, producing its large fragrant, yellow flowers during July and August in the greatest profusion; the plants grow about 3 feet high.

KWANSO (Double Orange Lily)—A double-flowering form of the Orange Lily, and a most desirable herbaceous plant, that deserves being planted very largely; large orange-colored flowers shaded copper; blooms the greater part of the summer.

HIBISCUS (Mallow).

MOSCHEUTOS—The fine old Swamp Rose Mallow. Large purplish pink or nearly white flowers. Grows 4 to 5 feet high.

MOSCHEUTOS (Crimson Eye)—Immense flowers of purest white, with large centers of velvety crimson. Blooms profusely, the plants being covered all summer with a wealth of most beautiful bloom.

IRIS (Fleur-de-Lis).

KAEMPFERI (Japan Iris)—The Japanese Iris should be planted in a somewhat cool, moist situation, and in rich soil. Its flowers are quite distinct from those of all the varieties, and will compare favorably with some of the exotic orchids. We offer a fine list of named varieties.

GERMAN—Under this head are included the varieties of several species of Iris, all distinguished by their broad leaves, and resembling each other in the shape of their flowers, and for this reason known under one head. All of easiest culture in ordinary garden soil, preferring a rich loam. No garden is complete without the German Iris. We sell them in assorted colors.

Herbaceous Peonies

It is surprising that so noble a flower, almost rivaling the rose in brilliancy of color and perfection of bloom, and the rhododendron in stately growth, should be so neglected. Amateurs seem to have lost sight of the many improved varieties introduced within the last few years, and our finest gardens, perfect in other respects, are singularly deficient in specimens of the newer kinds. The first point in their favor is hardiness. It may be truly said of them that they are "hardy as an oak." In the severest climate the plants require no other protection than that which they afford themselves. Then their vigorous habit and healthy growth, freedom from all diseases, and insects are important arguments in favor of their cultivation. The foliage is rich and glossy and of a beautiful deep green color, thus rendering the plants very ornamental even when out of flower. The newer varieties produce very large, handsome, regularly formed cupped blooms resembling large roses. No other flower is so well adapted for large, showy bouquets. The Peony may be planted either singly on the lawn or in borders. Where the lawn is extensive a large bed makes a grand show, surpassing a bed of rhododendrons. It is really a flower for the million. They blossom early in June. Our collection has been made with great care and includes the best and most distinct varieties.

VAN HOUTTEI—Dark red; very large and double.

REEVESI—Very full blush center, encircled by a row of broad pink petals.

LEOPOLD—Bright rose-color, with delightful rose fragrance.

ZENOBIA—Red; very fine.

LA SUPERBA—A beautiful, changeable variety, opening blush and pink, but fading to white when fully expanded.

HUMEI—Very large; clear rosy pink; late bloomer and one of the best and most vigorous.

WHITLEYI—Pure white.

ROSEA FRAGRANS—Violet-rose; very sweet; fine bloomer.

CHRISTOPHE ACORD—Rose, creamy, white center.

CUPREA SUPERBA—Rose, buff center.

DAUBENTON—Purplish rose.

DORCHESTER—Extra size; light pink.

DUCHESS OF ORLEANS—Pale red and blush.

DUKE OF WELLINGTON—Ivory-white, with creamy center; very large and double.

ECLATANT—Broad, full flowers of purplish crimson.

FESTIVA ALBA—Fine large pure white flowers; double.

FESTIVA MAXIMA—Extra large; white, center petals tipped carmine.

HENRY DE MAY—Light crimson; full, shapely flower.

ISABELLA KARLITZHY—Delicate rose; very large and full.

LADY LEONORA BRAMWELL—Silvery rose.

L'ESPERANCE—Mottled rose.

LOUIS FUGUIR—Light rose.

LOUIS RENAULT—Bright rose.

MAD. BREON—Flesh, with white center.

MAD. LEBON—Enormous flowers of cherry-red.

PAPAYER.

ORIENTALE (Oriental Poppy)—Nothing can equal these in gorgeous effect, and, whether planted singly or in masses, their large flowers are impressive.

PERENNIAL PHLOX.

The flowers of the Perennial Phlox form immense masses of bloom from the purest white to crimson. Grows 2 feet or more high; hardy.

ATHIS—Light salmon-rose.

AMORITE—White, overlaid with lilac.

BOUQUET DE FLEUR—White, carmine eye.

BARON DE PEUCH—Deep pink.

MARION DELORME—Broad flat flowers of bright rose.

HENRI MURGER—Large pure white flowers with carmine center.

H. MENIER—White, suffused with mauve.

JEAN D'ARC—Large, pure white flowers.

JOCELYN—Dwarf, with bright salmon-red flowers.

JULES JOUY—Lilac-rose, white center.

J. H. SLOCUM—Vivid crimson, with dark eye.

LASOLIEL—Light crimson, tinged lilac.

L'AIGLON—Bright rosy pink.

LANIBORE—Rosy pink; large, violet-purple eye.

LUMINEUX—Extra large bright rose, deeper rose center.

RUDBECKIA.

GOLDEN GLOW (Cone-flower)—We call attention to this notable novelty, and offer it as the finest hardy herbaceous border plant introduced for many years. It is of easy growth, and is giving complete satisfaction. A plant this season on our grounds the second year from planting, had 1,380 flowers and buds on it, some of the flowers being $3\frac{1}{2}$ inches in diameter. It makes a great show, and but few plants can vie with it in attractiveness. There is no floral novelty before the public to be compared with it for effectiveness and worth.

STATICE (Sea Lavender).

LATIFOLIA (Sea Pink)—A native of Russia and exceedingly hardy. The plant grows about a foot high, has broad, luxuriant foliage and slightly recurved spikes of lilac flowers.

YUCCA.

FILAMENTOSA—This beautiful and interesting plant should be in every collection. Hardy; almost an evergreen; grows in clumps, and when about to bloom throws up a flower-stalk from 3 to 4 feet in height, from which hang 100 to 200 creamy white, bell-shaped flowers. It remains in bloom a long time. (See cut.)

Summer-Flowering Bulbs and Roots

CALADIUM.

ESCULENTUM—One of the most striking foliage plants, either for pot or lawn planting. It will grow in any good garden soil, and is of easy culture. Full-sized plants are 4 to 5 feet high, with immense leaves. Give the bulbs a rich, clayey soil and plenty of water and they will give you striking tropical effects; nothing more decorative can be had for large lawns.

DAHLIAS.

Well-known garden flowers, now even more popular than ever. Plant Dahlia tubers in the ground when the season becomes warm, covering the neck some three inches up. If many shoots start, thin them out. After flowering, and before hard frost, take up the plants, remove the tops, dry the bulbs a little and put in the cellar until spring, when they can be divided and replanted. Look at them occasionally to see that they are not shriveling from too dry an atmosphere, nor starting the eyes too early in consequence of too much moisture and warmth. Our list includes the best of all the new and standard varieties.

Double Large-Flowering Sorts.

MISS THATCHER—Best golden yellow Dahlia.

CLARIBEL—Rosy purple.

SNOW DWARF—A fine white flower.

GLOWING COAL—Bright scarlet.

A. D. LIVONI—Sea-shell pink.

BEAUTY—Creamy white; good.

GLADIOLI.

Gladioli are among the most beautiful and popular summer-flowering bulbs. Their culture is very simple, and they will thrive in almost any rich soil, except a stiff clay, but are very susceptible to injury from rank manure. The ground should be well enriched with old manure that is thoroughly decomposed, which it is better to apply in the autumn. Plant the bulbs 6 to 9 inches apart. We have a large assortment of varieties.

Flowering Bulbs to be Planted in the Fall

CROCUS—In various colors, single and double.

HYACINTHS—Among the bulbs used for winter flowers, Hyacinth stands foremost on the list. Two methods are employed in flowering the hyacinth in winter, one in glasses filled with water, the other in pots or boxes of soil.

JONQUILS—Pretty varieties of the Narcissus, have a very agreeable fragrance; adapted to either pots or out-door culture. The bulbs being small six or eight may be put in a six-inch pot.

LILLIES—The lillies are entirely hardy with few exceptions. Quite fragrant and most of the varieties are very beautiful.

LILIUM AURATUM—Gold banded lily of Japan.

L. CANDIDUM—Common white.

L. HARRISII (Bermuda Easter Lily)—Pure white trumpet shaped flowers, very fragrant. The finest lily grown.

L. LANCIFOLUM ROSEUM (Rose Spotted).

L. LANCIFOLIUM RUBRUM (Red Spotted).

L. TIGRINUM (Double Tiger Lily)—Bright orange scarlet with dark spots.

LILY OF THE VALLEY—This lily is as hardy as any plant can possibly be, and when planted in open ground will increase pretty rapidly.

TULIPS—Owing to the late spring frosts, bedding plants cannot safely be planted before the early spring flowering bulbs are through blooming. They thrive well in almost any soil. Should be planted during October and November.

Hedge Plants

BERBERRY (Purple Leaf)—An interesting and beautiful variety with violet purple leaves and red fruit.

JAPAN QUINCE—Unquestionably a fine plant for an ornamental hedge. Grows very compact; will submit to any amount of pruning, while the brilliant and showy scarlet flowers make it exceedingly attractive.

PRIVET (Amoor River or Russian)—This is the most beautiful hedge plant grown. It has a luxuriant glossy leafage and thick clusters of fragrant white flowers. Hardy, free-growing, of dense neat habit; attractive all the year, in berry, leaf, or flower. Makes a beautiful specimen plant, a fine screen, group or hedge.

PRIVET (California)—One of the finest for hedges where it does not winter-kill. The foliage is large and glossy, and is almost evergreen. While we can furnish the California Privet for hedging purposes, we do not recommend it as being absolutely hardy north of the 41st parallel of latitude.

OSAGE ORANGE—One of the very best for defensive hedges where it can be grown without winter killing. It is of vigorous habit, and rapid, dense growth, and when kept properly trimmed it not only makes an effective hedge, but it is decidedly ornamental.

RUSSIAN OLIVE.

Where a large hedge is desirable, so that it can be pruned 5 to 7 feet high, there is no plant equal to the Russian Olive. For this work it makes an admirable hedge plant, prunes well and makes a beautiful background for cutting off undesirable views. Plants of this variety should be set about 4 feet apart.

THUNBERGII.

For ornamental hedging this variety is the best. It is very hardy, and will stand low temperature and drouth well. It also makes a splendid shrub to plant singly or massed. Some of the very finest hedges that we know of in central Iowa are of this variety of Barberry. One of its great beauties is that as soon as its leaves are off in the fall, it hangs full of red berries during the winter.

Hardy Ornamental Trees

The stock of ornamental trees that we offer will be found to comprise a sufficient number of kinds that are really valuable, so that our customers may, from the list offered, secure such a variety as will give full satisfaction. Windbreaks of trees, more especially if they are evergreens, besides being ornamental make the dwellings warmer, diminishing to an extent the consumption of fuel. They also make the outbuildings warmer for stock by night and the yard by day imparting comfort to the animals and saving a large amount of food.

A List of Trees Recommended for Various Purposes

For Streets, Roads and Wide Avenues—American Elm, Sugar and Silver Maple, Carolina Poplar.

For Driveways through Lawns and Parks—Norway Maple, Tulip Tree, Catalpa, American Linden.

Single Specimens of Large Growth to be Branched from the Ground—Birches, particularly Cut-Leaf Weeping; Austrian and Scotch Pines, Norway and Colorado Spruces, Balsam Fir.

Single Specimens of Medium Growth to be Branched from the Ground—Prunus Pisardii, Hemlocks, White Pine, Arbor Vitae.

Strong Growing Trees of Pyramidal Habit—Carolina Poplar, Balsam Fir, Pyramidalis Arbor Vitae.

Trees that Thrive in Moist Locations—American Elm, American Linden, Ash, Catalpas, Poplars and Willows.

Trees that Thrive on Dry Knolls or Poor Soils—Silver Leaf Maples and Poplars.

Best Trees for Windbreaks—Norway and White Spruces, Scotch and White Pine, Carolina Poplars and Silver Maples.

Flowering Trees—Judas Tree, Fringe Tree, White and Purple Lindens, Horse Chestnut, Catalpas.

Cut-Leaved Trees—Cut-leaf Weeping Birch, Weirs Cut-leaf Maple.

Purple and Scarlet-Leaved Trees—Purple-Leaf Beech, Plum, Purple Norway Maple.

ASH, WHITE—Rapid growing tree, of fine, symmetrical outline. A valuable street or park tree and should be extensively planted.

BIRCH, WHITE—A beautiful native tree, particularly in the northern part of the country. Its shining white bark and slender dark brown branches make it a conspicuous and very attractive object. Foliage large and handsome.

BOX ELDER—A fine, rapid growing tree, with handsome, light green pinnated foliage and spreading head; very hardy.

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

CHESTNUT, AMERICAN or SWEET—Well known beautiful tree, valuable for fruit and timber. Should be planted only on thin, dry soils.

CHESTNUT, HORSE—Common or white, flowering. A very beautiful, well known tree, with round, dense head, dark green foliage, and an abundance of showy flowers in early spring.

ELM, AMERICAN WHITE—The noble, spreading, drooping tree of our woods. One of the grandest of park or shade trees.

AMERICAN ELM

TREE—One of the most beautiful lawn trees. Beautiful, rich, glossy, fern-like foliage. Rapid growth. A tall upright grower.

CRAB (Bechtel's Double Flowering)—This blooms in early spring exhaling a most delightful fragrance from its masses of double delicate pink flowers.

ELEGANS ("Russian Wild Olive")—A very hardy and quite a rapid growing tree with a silvery foliage; very striking in appearance. Its ability to endure extreme cold and drouth makes it desirable for ornamental lawns and for hedges.

MOUNTAIN ASH—Very hardy and handsome with fine clusters of scarlet berries hanging on the trees in winter; a beautiful tree for the lawn.

FRINGE, PURPLE—Very conspicuous in mid-summer when veiled with a thick mist of dusky purple flowers, so light as to simulate wreaths of smoke. This is sometimes called "Smoke Tree."

FRINGE, WHITE—A beautiful little tree, with large, soft, heavy leaves, almost hidden in spring time by clouds of delicate, fragrant white flowers of a drooping, fringe-like character.

LINDEN (American or Lime)—A rapid growing, large, beautiful native tree. Flowers very fragrant.

MAPLE (Silver Leaved)—Leaves white underneath; of rapid growth; very ornamental and one of the best street trees we have.

NORWAY MAPLE—Of spreading, rounded form; foliage large, dark green; a rich and majestic shade tree.

SUGAR MAPLE—A beautiful, stately tree of fine form; a desirable shade tree. Slow grower.

MAIDEN HAIR or GINKGO

CAROLINA POPLAR—Takes front rank among best of poplars; it is one of the most rapid growers among shade trees. Its branches spread just enough to give it a symmetrical appearance. It has advantages over other shade trees because it will grow on any kind of soil, swampy or muck, light or heavy. Its roots penetrate the hardest soil, it withstands all hardships and thrives in places where others fail to live. It is easily started and gives shade in a short time. Its leaves are large and stay green till quite late in the fall.

PLUM (*Prunus Pissardii*)—Purple leaved. One of the most beautiful purple leaved trees or shrubs. The leaves and shoots are of a rich, peculiarly vivid dark purple, holding the color well through the entire season. It also produces small, white, single flowers in great profusion in May, followed by black fruit of ornamental appearance. Winter pruning gives stronger shoots and larger leaves.

WALNUT, BLACK—Valuable for nuts and timber. It is hardy and succeeds best on a rich, deep, moist soil. Too well known for long description.

CAROLINA POPLAR

Weeping Ornamental Trees

BIRCH (*Cut-Leaf Weeping*)—Erect, stately, rapid growing tree, with long, slender, pendant branches, delicately cut leaves and silvery white trunk; especially fine when near evergreens; hardy; the most elegant weeping tree on the list.

ELM CAMPERDOWN, WEEPING—A vigorous grower; leaves large, dark green and glossy, covering the tree with a luxuriant mass of verdure; very desirable as an ornamental.

MOUNTAIN ASH (*European Weeping*)—A strong grower; remarkably pendant; perfectly hardy; succeeds admirably on prairie soil.

TEAS' WEEPING MULBERRY—Forms a perfect umbrella shaped head, with long slender branches drooping to the ground, parallel to the stem; very hardy; one of the prettiest small weeping trees.

WILLOW (*Kilmarnock Weeping*)—One of the finest weepers, but the stock upon which it is usually budded is not perfectly hardy in exposed situations.

EVERGREENS

We take the credit to ourselves of being the largest and most successful Evergreen growers in the state. We claim the distinction of being pioneers in this line. We probably have grown more Evergreens and have more Evergreen growths in the Mississippi valley to stand as a monument of our efforts than any other firm. Our success has been in growing Evergreens adapted to our soil and climatic conditions. We transplant them several times which gives them heavy fibrous roots, and insures them to grow if properly handled. The following varieties are the best and we guarantee them in every particular. Evergreens are essential to successful landscape gardening and the protecting of our homes from the bleak winds.

A glimpse of one corner of the old home grounds of our manager, M. J. Wragg. Red Cedar Hedge in front, Colorado Blue Spruce at right-hand side

No one thing, not even a stately mansion, so sets off and adds to the beauty of the landscape as groups and single specimens of well-grown Evergreens. No tree is more beautiful or useful for windbreaks and shelter-belts. No forlorn looking habitation is found, or shivering animal seen, on a farm protected and beautified by this noble class of trees. Such a farm will always sell, and at a price that shows that such things are appreciated. We make a specialty of growing them in large quantities, pack them in moss, and the trees reach our customers fresh and ready to grow. Plant only in spring.

Uses of Evergreens—Aside from the ornamental uses of Evergreens, their great value lies in their planting "shelter-belts" about our home grounds and yards. The varieties best adapted for this use are the Norway Spruce, the Scotch Pine and the White Pine. The best results come from planting them in double rows, using Spruces for the inside row.

For Parks and Extensive Grounds—Write for full information. It will be gladly furnished.

For Lawns and Small Places—Whatever specimens are planted, let them be of the finest species, of moderate size, of graceful habit of growth, and handsome foliage. A tree with variegated foliage may be occasionally introduced to add to the beauty of the grounds.

Do not litter the lawn with specimens. A broad sweep of green turf, as large as you can afford, bordered and sheltered with trees, with masses of shrubs in angles, is most satisfactory and restful to the eye. Depend mainly upon dwarf shrubs for small places, and, in making your selection, aim to secure a succession of bloom. Hardy herbaceous border plants can be used with the most satisfactory results.

Use Scotch Pine, White Spruce, Norway Spruce, and White Pine for high screens, and Arbor Vitae or Red Cedar for low ones.

ARBOR VITAE (American)—This plant is, all things considered, the finest evergreen for hedges. It is very hardy and easily transplanted, few plants failing if properly handled. It grows rapidly and with little care, or rather by easy management, it soon forms a most beautiful hedge, very dense and perfectly impervious to the sight. It is never planted to turn stock, but it forms a most desirable and ornamental screen to divide the lawn from other grounds.

ARBOR VITAE (Pyramidalis)—A superb, new and hardy sort, of very compact habit; much better than the Irish Juniper, and grows in a perfect column. Largely planted in cemeteries, owing to the small amount of space it occupies. This is perhaps the most valuable Arbor Vitae in cultivation

BALSAM FIR—A handsome, compact, erect, pointed tree, with short, soft leaves, which are dark green above, silvery beneath; a good grower.

HEMLOCK—An elegant pyramidal tree, with drooping branches and delicate dark foliage, like that of the Yew; distinct from all other trees. It is a beautiful lawn tree and makes a highly ornamental hedge.

PINE, AUSTRIAN or BLACK—A remarkably robust, hardy, spreading tree; leaves long, stiff, dark green; growth rapid; valuable for this country.

PINE, SCOTCH—Is one of the most rapid growers while young, one of the

ARBOR VITAE—AMERICAN

COLORADO SPRUCE

best for shelter planting in the West. It will make the best windbreak in the least time of any; it is a very valuable species.

PINE, WHITE—One of the best evergreens. The foliage is a warm, light green, often with a bluish tinge. The leaves, in fives, are three or four inches long, soft and delicately fragrant. It does not grow as rapidly the first few years as some, but after being planted eight or ten years it is the most rapid grower of all our evergreens.

SPRUCE, COLORADO BLUE—This species has been tested at various points on the prairies of the West and Northwest with perfect success, and during a temperature of 30 degrees below zero, in exposed situations, entirely uninjured. One of the hardiest evergreens and the most beautiful in color and outline. "This is the king of spruces, clothed in royal robes of silver and sapphire, a very Kohinoor among the gems of the Rockies."

SPRUCE, NORWAY—A lofty, elegant tree of perfect pyramidal habit, exceedingly picturesque and beautiful. One of the best evergreens for windbreaks.

SPRUCE, WHITE—A tall tree with compact branches and light green foliage. Very handsome.

WHEN TO SPRAY.

APPLE TREES—For prevention of leaf blight, spraying with Bordeaux mixture or Ammoniacal Carbonate of Copper as soon as the leaves are full grown. To destroy aphids or plant lice, spray with kerosene emulsion as soon as the pests appear. To destroy the codlin moth, canker worm and curculio, spray with paris green or London purple, $\frac{1}{4}$ pound in forty or fifty gallons of water, soon after the blossoms fall, and again two weeks later. To destroy web worm spray with London purple or kerosene emulsion from August 1st to 10th or as soon as pests appear. This application should be made during the middle of the day, when the worms are out of their webs and feeding on the leaves.

CHERRIES—Treatment same as recommended for the apple.

PEARS—The pear slug can easily be destroyed by spraying with paris green, four ounces to fifty gallons of water, or with kerosene emulsion, as soon as the slug begins operation. Pear and quince blight can be destroyed by spraying with Bordeaux mixture. The codlin moth and curculio should be treated same as recommended for apple trees.

PLUMS—Destroy the aphids with kerosene emulsion and a fine spray nozzle. The curculio can be destroyed by spraying with 3 ounces Paris green to forty gallons of water. First application should be made as soon as blossoms have fallen, and repeated at intervals of a week or ten days. Four applications should be sufficient. Other enemies of the plum will be destroyed by this method, but in all cases be particular to keep the poison and water constantly stirred.

PEACHES—If attacked by the black peach aphids, spray with kerosene emulsion. The plum curculio frequently attacks the peach in which case spray with paris green, 2 oz. to 50 gallons of water; be sure to keep it well stirred and use with caution. Never use London Purple on peach trees.

FOR GRAPE ROT AND MILDEW—Use Bordeaux Mixture.

CURRANTS AND GOOSEBERRIES—To destroy the worms, spray with powdered Hellebore, one ounce in three gallons of water, as soon as the worms appear. To destroy the yellow aphids, spray with kerosene emulsion early in the season. To prevent mildew use one-half ounce potassium sulphide to one gallon of water.

FORMULAS.

KEROSENE EMULSION—In making kerosene emulsion for spraying trees for lice, be sure and follow the correct method. Dissolve in two quarts of water, one quart of soft soap or one-fourth pound of hard soap by heating to the boiling point, then add one pint of kerosene oil and stir violently for from three to five minutes. This may be done by using a common force pump and putting the end of the hose back into the mixture again. This mixes the oil permanently, so that it will never separate, and it may be diluted easily at pleasure. This mixture should be diluted to twice its bulk with water or about fourteen times as much water as kerosene. The kerosene emulsion is successful in destroying cattle lice and sheep ticks, as well as all varieties of plant lice.

Any of the Agricultural Experiment Stations will furnish bulletins so arranged that the grower may see at a glance what to apply, when and how to make the applications.

THE WRAGG CHERRY

Of the English Morello type and very similar in fruit, but averages larger, a few days late in ripening, and possibly has slightly more acidity. Tree dwarfish, with spreading, round head; abundant and regular bearer; bears younger than English Morello, stronger grower; not so subject to disease. During the last twenty years has fruited finely for us.—Early August.

Old trees in this county have a record of twenty years without a failure.—M. J. Graham, Dallas Co unty, Iowa.

Well adapted to high latitude and prairie regions of the northwest. One of the best sour varieties.—Illinois Horticultural Society.

VREDENBURG & CO INC ROCHESTER N Y

“WRAGG” CHERRY

Planted in many locations and considered a very good market sort as it is a good shipper and ripens after other cherries are gone, when there is an excellent demand.—Prof. E. E. Little, Horticulturist, Iowa State College.

Trees obtained from Mr. Wragg have borne and fruited all right; entirely satisfactory.—C. L. Watrous, Ex-President, Iowa Horticultural Society.

Montmorency is very profitable, a beautiful tree and hardy; English Morello, good; Wragg is a gem—bears young, ripens late, never failed to crop in eighteen years in Iowa. Montmorency and Wragg give the most money bud on Mahaleb and plant 16x18 feet—Major Frank Holsinger, Wyandotte County, Kansas.

The principal variety upon which we can depend for a crop the country over.—Elmer Reeves Treasurer, Iowa Horticultural Society.

Has given a good crop the three years I have been here, some four and five year trees yielding over \$3.00 worth of fruit each.—G. F. Sheffer, Boone County, Iowa.

AWARDS.

First Premium and Award of Merit at New Orleans Exposition some twenty years ago.

First Premium and Diploma for largest and best collection of Apples, Plums and Pears at Iowa State Fair, in 1889.

"Sweepstakes" for largest and best collection of varieties of fruits adapted to and grown in Iowa at Iowa State Fair, in 1891.

First Premium for Stoddard Plum, as the largest American variety exhibited at the World's Fair, Chicago, in 1893.

First Premium for Largest Collection of American Plums at Iowa State Fair, in 1895, our exhibit at this time containing over forty-five varieties.

Bronze Medal and Diploma for largest exhibit of Apples and Plums from Iowa, at Trans-Mississippi and International Exposition, in 1898.

Gold Medal and Diploma for largest display of Cherries and Plums from Iowa, at Louisiana Purchase Exposition, St. Louis, 1904.

SOME FRIENDLY ADVERTISING.

Among our friends of the press are some old customers and neighbors who delight to honor us with friendly comments on the following order:

"The Wragg Nurseries have in the past made a specialty of the growing of fruit trees and plants adapted to the great Mississippi valley. It has been a conceded fact that they are the largest growers of evergreens in the West. They have always been foremost in the introduction of new fruits. Father Wragg was a pioneer in the good work of helping to make home-like homes, and the boys are chips off the old block. Without fear or favor they have gone on in the great work of changing the old and defective lists whenever newer varieties or species were well proved. . . . These nurseries abound in a variety of stock, particularly of rare plants and shrubs. Every man has his hobby, and the managers of these nurseries ride the evergreen horse. Almost every evergreen of the temperate zone is to be found here. . . . In plums they have about 50,000 trees, chiefly of the Americana type, which is best adapted to Iowa's severe climate."—Fruit-Grower.

"In the ornamental department of the Wragg Nurseries there are upward of 600,000 evergreens of various kinds, all transplanted and ranging from 12 inches to 4 feet. Notwithstanding the fact that they yearly import for testing many new varieties, these nurseries yet make a special feature of growing Iowa trees for Iowa people. The Experiment Station, conducted by the manager of the Wragg Nurseries on their grounds, is an immense advantage enabling them to know just what to recommend and what to turn down. We were very much impressed by the evident desire to represent everything as it actually was without a particle of exaggeration. This, we are told, is the way they do business all along the line."—Western Garden and Poultry Journal.

"The Wraggs, to a greater extent than any others we know, have, from the start, paid much attention to new and promising varieties, until now their nursery has more of the new varieties than any other nursery we have visited for many years. Not only in fruits have they been energetic, but in ornamentals, until now it is hard to name a desirable fruit or shrub that they have not in stock. . . . There are evergreens ready for planting, having been transplanted and root-pruned by the hundreds of thousands. The Wragg Nursery has been famed for many years for its number and variety of evergreens. We noticed acres of cherry, apple, plum and pear trees, and, in fact, great quantities of all the leading fruits. Acres of gooseberries and currants, just the right size for planting, and ornamentals in such profusion as to preclude the idea of even enumeration. The object lesson to be seen on every hand on the experiment grounds affords the visitor a chance to judge of the merits of the different varieties. Of plums in fruiting, as well as apples and other fruits, a chance for study is afforded that is rarely equaled anywhere. Here may be found the Wragg cherry in great abundance and perfection, while the English Morellos have nearly all died under the same conditions that have allowed the Wragg to thrive so conspicuously."—The Rural Northwest.

"The Wragg Nurseries have made a specialty of growing fruit trees and plants adapted to the Mississippi valley. They are the largest growers of evergreens in the West, and have been foremost in the introduction of new fruits. . . . Mr. M. J. Wragg is president of the State Horticultural Society, superintendent of the horticultural staff of the state fair and a member of the State Board of Agriculture. He also has charge of one of the experiment stations of the State Horticultural Society and has several acres devoted to this work. In this department will be found much that would be instructive to any one who is interested in horticulture. Hundreds of fruit trees of all kinds are grafted in different combinations, with complete records in every case, and whenever a new variety is produced that promises to be an improvement in any way over those already established, it is preserved. In this way many varieties of our choicest fruits are produced. Fruits which it was supposed could not be grown in this climate were produced and are proving a success. Mr. Wragg says it will not be many years until we will be growing pears and peaches just as easily and profitably as we are now growing apples and cherries.

"The business of this great nursery firm is very rapidly increasing. Their unswerving integrity, careful attention to business, and the fact that the stock they furnish their customers is home grown, thoroughly tested and found suited to the climate, are probably the causes of their success."—The Farmer's Review.

A SWEET CHERRY--Hardy in Iowa

Something Worth Talking About

Saylor Sweet Cherry

This is the first time that we have been able to offer a hardy, sweet cherry to our Iowa planters. We have been testing, in the last twenty-five years, a dozen varieties, but have at last found one strictly hardy, high-grade, and very productive. The history of the cherry is that it is a stray that was introduced by the Iowa Agricultural College in 1880. We are not certain as to its origin, but as to its hardiness, will say that it is equal to any cherry that we have. Its color would be called white or yellow, fruit very large and sweet with just a little, mild subacid. Tree is a great bearer, leaves large and very thick. We have named the cherry the Saylor, for the reason that Professor Chas. Saylor of Des Moines, Iowa, has growing on his lot three of these cherries which are now fifteen years old. They have given him eight heavy crops right along. We are confident that the fruit planting public will hail the good news of a hardy sweet cherry and we hope to have our friends try them, and we are confident they will prove hardy anywhere that the Early Richmond or Montmorency will grow.

PRICE: 5 to 6 feet, \$1.50 each
4 to 5 feet, 1.00 each
3 to 4 feet, .75 each
2 to 3 feet, .50 each

SAYLOR SWEET CHERRY TREE

MR. M. J. WRAGG;
Des Moines, Iowa.

Des Moines, Iowa, Dec. 4, 1908

Dear Mr. Wragg:—

Referring to your inquiry with reference to the cherry which you designate as the "Saylor," I will state that about fifteen years ago Prof. J. L. Budd, Professor of Horticulture at Iowa Agricultural College, presented me with three small trees which he had brought back from his trip to Siberia, Russia and North China. These I brought home in my grip. They grew without any apparent effort or hesitation, and have developed into as fine healthy trees as anyone ever looked at. The largest one is about twelve inches in diameter, the smallest about ten. There is not a gnarl, a knot, a scab or anything indicating a lack of vigor; they are perfect specimens. They have always borne luxuriously. I have received as high as five bushels off the three trees.

My experience with them led me to believe that this cherry is a real discovery to the fruit interests of our fruit district and will greatly increase the cherry resources of a large section. This cherry has qualities not obtained in other varieties, viz: the hardiness of the tree; firmness of the fruit; its size and flavor. They will go further to market, and can be preserved, pickled and put up in many forms.

Yours truly,

See our nearest salesman or write us

THE WRAGG NURSERY CO
Des Moines, Iowa

C. F. Saylor