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Hardy Trees and Plants

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SAPA—ONE OF PROF. HANSEN'S
HYBRID CHERRIES

The Jewell Nursery Co.

Lake City, Minn.

Established 1868

1500 Acres

Overlooking the Apple Department of the Jewell Nurseries. Over a million apple trees, all hardy varieties, are shown in these blocks.

The Jewell Nursery's Handbook Hardy Trees, Shrubs & Plants

THE Jewell Nursery catalogs have always been the most complete of any issued in the North. The last edition of our two general catalogs, one comprising fruit stock and the other ornamental trees and plants, has given to northern planters a complete guide, covering all the varieties grown in this section, both those that have been tested and proven, and others that are being tried.

This catalog is intended as a supplementary publication in which the varieties listed shall be limited to those sorts that have been the longest planted and are at present the most in demand. Many varieties which are not now much planted have been omitted, also many late introductions that have not as yet been thoroly tested. The list given herein therefore may be considered as a safe guide for the average planter.

As to hardiness, the bulk of the varieties listed are hardy in the latitude of Minnesota. There will also be found supplementary lists, comprising a few of the varieties such as are planted by our customers in such sections as Michigan, Iowa, Nebraska, Idaho, etc. It is generally understood that we are specialists in the production of hardy varieties for the North. Our large nursery plantations here at Lake City, now the largest nursery in America, are devoted almost entirely to these varieties.

Work teams starting from the stables in the early morning for various parts of the Nursery. The Jewell Nurseries require the constant use of thirty to forty head of mules and horses for their care and cultivation.

APPLES

NO fruit known to the cultivator in the North Temperate Zone can take the place of the apple as a food product. As a culinary fruit, none excel it. It graces the table in a greater variety of forms than any other, and as a dessert fruit, few are its equal, and none its superior. The time has come when Minnesota and the other northern states produce a large quantity of the apples they consume. Not only the splendid late fall and early winter varieties are now grown in large quantity, but many new creations in the line of late keeping varieties have been introduced, and are now proving as hardy in the North as the Russian varieties. Jewell apple trees are grafted and grown here in the North under all the severe climatic conditions of this section, and they are therefore superior as a stock for northern planters, both in the garden and orchard.

Standard Northern Varieties

The following list comprises varieties that have either originated in the northwest or have been introduced from Russia. They are varieties that have been tested in the northern states and are now planted in this section.

Anisim Season November to January. Tree spreading and a prodigious bearer; unusually free from blight and about equal with Wealthy in hardiness. Fruit medium to small, roundish; color, greenish nearly covered with dark red, over which is a bluish bloom; flesh white, juicy, fine grained, pleasant sub-acid. Beautiful when well ripened.

Brilliant Origin Iowa. Very bright red; takes a splendid polish; it is a fine looking apple; medium size, round; fine quality, season mid winter.

Bismarck A novel and curious variety; a dwarf orchard tree. Trees grown in pots or tubs make very interesting decorative specimens.

Charlamoff Season August to October. Tree spreading, vigorous and productive. Fruit above medium to large; light yellow with crimson stripes and splashes; flesh white, fine grained, pleasant flavor; often stained with red next to skin.

Duchess (Duchess of Oldenburg) Season August and September. The standard of hardiness in Minnesota.

Tree upright, vigorous, an early and annual bearer of uniformly large crops. Fruit large, greenish yellow with red stripes; flesh light yellow, medium fine grained, firm; flavor a pleasant acid; a great cooking favorite and prime market sort. Duchess is a good shipper for an early apple and commands good prices. Should be found in every orchard, large or small.

Grundy Origin Iowa. Season September to November. Tree vigorous and spreading; an early and exceedingly prolific bearer. Fruit large, regular, roundish, flattened at ends; surface yellow, mostly covered with dark marbled and mixed red; flesh, white, tender, juicy, sub-acid, very good flavor.

DUCHESS

greenish yellow with dull bronze red on sunny side; flesh acid, juicy, very good for cooking.

Hutchins October. A large, beautiful fall seedling of Duchess. Considered superior by many.

Iowa Beauty Originated in northern Iowa. Oblong, round, large; light with red stripes; sub acid; quality very good; season early winter.

Jewell's Sweet A handsome tree—healthy and a good bearer. Fruit medium size; sweet; color yellow and green; season early. Originated in northern Iowa. This variety we have tested for a number of years. We consider it one of the best sweet apples that has been introduced in the Northwest.

Hibernal

Season November, December. Probably the hardest of the Russian apples adopted by many prominent horticulturists as a standard of hardiness. Tree, sturdy, vigorous; very spreading and productive. Fruit large to very large, irregular,

Jewell's Winter Season January to March. Tree vigorous; an early bearer. Fruit hangs to tree in hardest winds—a valuable feature. Fruit medium; surface yellow with rosy crimson blush on sun side; flesh white, tender, crisp, juicy, pleasant mild sub-acid, flavor good. One of the best late keeping varieties for northern orchards.

JEWELL'S WINTER

Judson March. Fine open grower; fruit large; green ground with heavy red splashes; flesh firm, sub-acid. Productive and desirable.

Longfield Season October to December. Fruit medium; shady side yellow with greenish bloom, sunny side yellow and red; flesh white, fine grained and of excellent aromatic flavor; juicy, sub-acid.

Lowland Raspberry Season August. Also known as Lievland Raspberry. Fruit medium to large; splashed and shaded with red; flesh stained with red, fine, tender, juicy; flavor sub-acid, extra good; very beautiful.

Malinda Season February to March. An irregular but steady grower of about same hardiness as Wealthy. Wherever grown in Minnesota it is giving great satisfaction as a long keeper. Fruit medium; green with blush of brownish red; flesh hard, medium fine grained: flavor sub-acid and good.

Maple August. One of the few sweet apples that are hardy; fruit medium, yellow; excellent quality.

McMahon Season October to December. Also known as McMahon's White. Fruit large to very large; color greenish pale yellow to nearly white, often with suffused pale blush on sunny side; flesh pale yellow with good acid flavor. A good table apple in season; splendid cooker.

Maiden Blush September and October. Pale yellow with red cheek, tender and pleasant but not highly flavored.

Napoleon The tree has proven hardy in central Minnesota. Fruit is large; color green, streaked with red. Excellent quality; fruit keeps until April. Stem is short and thick. Fruit hangs to the tree in a remarkable manner. One of the most desirable, all around apples for home and market use that we have controlled.

Northwestern Greening Season December to March. Fruit large to very large; green, becoming yellowish green when ripe; flesh yellow, fine grained and firm; flavor a good sub-acid; very smooth and attractive. Should be given plenty of room in the orchard to secure large, even fruit.

OKABENA

Okabena Season September to November. Vigorous, absolutely hardy and an ideal

orchard tree in every respect. Bears very young. Fruit medium to large; yellow, striped and splashed with carmine which is heavy on sun side; flesh yellowish white, fine grained, crisp and juicy; flavor sprightly sub-acid; quality excellent. Ripens after Duchess and valuable in market on that account.

Patten's Greening Season November to January. Fruit large to very large when well grown; green with often a blush of red or brown; flesh yellowish white, rather coarse but firm; core small; flavor a pleasant acid. Tree vigorous and spreading and exceptionally hardy; an early and regular bearer.

Peerless Season October to December. Fruit medium to large; yellowish green with stripes and splashes of carmine; flesh yellowish white, fine grained; flavor agreeable sub-acid.

Pewaukee Season December to March. Successful in favorable locations. Fruit large, yellowish green, striped and shaded with dull red, overlaid with a bluish bloom; flesh yellowish, rather coarse grained, firm, juicy; flavor sub-acid.

Phoebe January. Large, green streaked with red; crisp, juicy, tart.

✓ **Radiant** This splendid variety is a cross between the Duchess and the Wealthy. It partakes of the characteristics of both. The tree is more hardy than the Wealthy. Does not blight with us. Fruit is large in size, oblong; handsome color—green, striped with crimson. A remarkable apple to hang on the tree, stem being thick and strong, seldom drops even in the hardest winds. It is a good market apple—commands a good price; keeps until December.

Rollin's Prolific December to January. Medium; yellowish green; fine grain, brisk, sub-acid.

✓ **Russian Wax** September to October. A beautiful apple of the Duchess type and of delicious quality.

Scott's Winter Season December to February. Fruit small to medium; color deep red over yellow ground; flesh yellowish white, coarse grained, juicy; small core; flavor pleasant acid, good.

Superb Large; green; flesh crisp and yellow; sub-acid; quality very good; season late. Tree vigorous; a good winter apple.

Tama February to March. Medium; flesh firm, crisp and sweet.

Tetofski Season August. One of the earliest apples to ripen in the northern states. Fruit small to medium; light yellow, striped and splashed with red; flesh white, tender, juicy; flavor sub-acid, extra good quality. Tree stout and upright in growth.

Talman Sweet Season December to March. One of the most popular of the old eastern varieties. Tree is vigorous, upright, spreading and very productive. Fruit above medium; whitish yellow, often with faint blush on sunny side; flesh white, firm, moderately juicy, fine grained, rich and sweet.

University Season November and December. Fruit large, very regular; surface a clear yellow on sunny side; core medium, flesh white with yellow veinings, flavor pleasant sub-acid, quality good; tree hardy.

WEALTHY

Wealthy Season October to March. Almost too well known to need description. Since its origination by the late Peter M. Gideon in 1861, it has rapidly spread over the entire country until now it is extensively planted in all the apple growing states. Fruit large, regular, smooth, light yellow with crimson stripes and splashes; flesh white, often stained with red, tender, very juicy, sprightly sub-acid with delicious aroma. Splendid eating, dessert and cooking apple. Market demand never filled. Minnesota is justly proud of this variety.

Walbridge Season January to March. Size small to medium; yellowish green, striped and splashed with red; flesh fine grained, juicy; flavor sub-acid.

Wolf River Season October to January. One of the very largest apples grown in the North. Color yellowish green with stripes and splashes of carmine; very handsome and showy; flesh nearly white, firm and rather coarse grained; flavor sub-acid, fair to good.

Yellow Transparent Season early August. One of the very earliest apples. Fruit medium; smooth, transparent skin; clear white, becoming pale yellow when fully ripe; flesh white, tender, fine grained, of splendid quality.

Semi Hardy Varieties

The following varieties are among those more largely planted in the large commercial orchards of New York, Michigan, Arkansas, Idaho, etc. While these varieties are semi hardy in Minnesota, we are able to produce the trees in our nursery and take pleasure in offering them to our trade in the localities where they are a success.

Alexander Season September to November. Fruit large conical; surface, greenish yellow, streaked with red on sunny side. Has plump flesh, yellowish white in color; crisp, tender, with a rather pleasant sub-acid flavor.

Baldwin Season December to March. The great commercial late winter keeper of the Eastern States. Too generally known to need description.

Bell Flower Oblong, large; yellow tinged with red; flesh tender, juicy. Sub-acid; quality excellent. Either a dessert or market apple; season fall.

Ben Davis Season January to April. Vies with the Baldwin as a profitable commercial variety in many sections. Fruit large, handsome, brightly striped with red; flesh of medium quality, variable in flavor.

Fameuse (Snow Apple) Season November to January. An old and well known variety. Fruit small to medium, greenish yellow mixed with faint stripes of red; tender, juicy, slightly perfumed.

Gano Season January to April. A rival of Ben Davis as a market apple in the central United States apple belt. Much like and fully equal to Ben Davis, except is redder and not quite so large.

Grimes Golden Season January to April. Tree vigorous, upright, spreading, a good early bearer. Fruit rich yellow, sometimes with net veining of russet; flesh yellow, firm, crisp, rich spicy, sub-acid; quality the best.

Jonathan Season November to February. A delicious and strictly dessert apple that always commands highest market prices. Fruit medium, roundish; surface very smooth, clear light yellow almost covered with rich dark red on sunny side; flesh white, tender, juicy, aromatic.

McIntosh Season December and January. A choice variety. Tree vigorous with spreading head; a good annual bearer. Fruit above medium to large; almost covered with brilliant solid crimson, a beautiful fruit; flesh snow white, crisp, very tender, aromatic sub-acid; very good quality.

Red June Oblong; medium size; yellow back ground with crimson red. Very tender and juicy; flesh white; sub-acid. Excellent quality; early.

Rhode Island Greening Season December to March. Fruit large, smooth, dark green overspread with yellow; flesh tender, rich, rather acid but highly flavored.

Winesap Season December to May. Has been popular in the East for over one hundred years and is favorably known wherever it is hardy. One of the leading export apples.

CRABS

The following varieties of Crabs are especially recommended for planters in all sections.

Alaska Fruit good; rather large for a crab; tree hardy.

Beach's Sweet Season September. Fruit large, color a bright, rich carmine when ripened in the sun; unexcelled in quality. Flesh is crisp, juicy and at the same time firm.

Dartt (Hybrid) Season September to October. A vigorous, extremely hardy and ideal orchard tree. Fruit large for a hybrid—yellow ground covered with rich red stripes, underlaid with lighter red on sunny side; flesh yellow, medium fine grained, sub-acid.

Early Strawberry Season early August. An old-time favorite, especially in the Northwest. Fruit medium, greenish yellow ground

overspread with carmine stripes and splashes; flesh nearly white; flavor mild, sweet, very good. One of the best eating crabs.

Excelsior September. Medium, red, of good cooking quality; well known.

Fairbault (Hybrid) October and November. A large handsome hybrid, red over greenish yellow ground. Tree upright, vigorous, hardy; very free from blight. A splendid variety.

Florence Season late August. A hardy spreading tree; color carmine; flesh yellowish, acid; excellent for cooking. A fine jelly crab, and valuable for early market as well as home use.

General Grant October, November. Large yellow, red stripes; flesh white, sub-acid.

Gideon No. 6 Origin Minnesota. September Has been renamed Mary.

Hardin November. Large, green, tinged with red; sub-acid, good quality.

Hiller Season September and October. A vigorous upright grower. Bears regularly and abundantly, and fruit hangs on well. Fruit medium to large; rich green overspread with dull red on sunny side; flesh white, firm, very juicy, sub-acid, pleasant. A splendid crab for jelly and other cooking purposes, for which it fully equals Transcendent; tree superior to that variety in its freedom from blight.

Hyslop Season October to December. Fruit medium; heavy shadings of deep crimson and splashes of maroon; flesh fine, firm, yellow, astringent; bears abundantly in clusters which makes the tree exceedingly ornamental.

Lyman's Prolific Season September to October. Fruit large, yellow and red, striped and splashed; flesh yellow and rather fine; of first-class cooking and preserving quality.

Minnesota (Hybrid) Season October to January. One of the most desirable; bears liberally with age and is growing in favor. Fruit large, light yellow, often splashed or mottled with blush on sunny side when allowed to fully ripen; flesh cream white, fine grained, juicy; flavor mild sub-acid and slightly aromatic. Delicious to eat out of hand and particularly desirable for culinary purposes.

Orange (Hybrid) Season October. Fruit large, even, light orange when ripe; flesh white, fine grained and crisp; firm and a good shipper; flavor delicate and juicy. Makes a fine

amber jelly and a splendid canner. Also unexcelled for preserves.

Pickett's Prolific (Hybrid) A favorite on account of its good, firm, shipping quality and the hardiness of the tree. Fruit medium to large for a crab; color green, slightly yellowish overspread with a dull red on sun side; flesh firm and of good quality; flavor sub-acid; another good jelly crab. The fruit is ripe and marketable after the Transcendent and others of that season are gone and thus commands a good price on the market. Its firmness makes it a good shipper.

Quaker Beauty Northern Iowa. Well known as a late keeper for a crab.

Siberian Fruit small, round; flavor sour—still it is excellent for jelly and canning. A free grower and handsome; very hardy.

Sweet Russet (Hybrid) Season August and September. Size medium; color yellowish green with russet markings; flesh yellowish, firm and tender; juicy, sweet and of very pleasant flavor.

Tonka September. Size medium; prolific; a good jelly crab in season.

TRANSCENDENT

Transcendent Season September. Fruit medium to large; color brownish yellow with blush of carmine; flesh firm and crisp, yellowish, fine grained, very juicy, acid; fine for jelly.

Whitney (Hybrid) Season August and September. Fruit large to very large for a hybrid; yellow, striped with red and mostly covered with red on sun side; flesh yellow, very juicy, and fine grained; flavor rich and almost sweet.

PLUMS

The Plum is the great native tree fruit of this northern region and the improvement which the native varieties have made under cultivation makes it equal in importance to that of apple.

In productiveness the native plums are unsurpassed by any other class of plums or indeed by any tree fruit. In fact the tendency of nearly all varieties is to over-bear which however is easily overcome by judicious thinning before the fruit is developed. They are all very regular in bearing and a good crop may be expected each season if proper care is given to the tree. No other fruit tree in this or any other section of the country is more easy of culture, when once it is understood, than is the plum of native origin. Unlike the apple, these plums have been here in this climate for hundreds of years and are so constituted in root, branch and fruit bud that the extremes of our seasons do not injure them. Thus the grower has only the matter of proper culture to contend with as the best varieties are thoroly hardy.

Select Varieties of Americana Plums

There has sprung up a long list of native varieties and we present below those which have been more thoroly tested and found superior by actual commercial growers in the North. We have therefore eliminated from this list many varieties of real merit as we find the average planter prefers to order from a list restricted to the **best varieties** and thus varieties "just as good" or "not quite so good" are here dropped.

Aitkin Has the most northern origin of any commercial plum and is also one of the very earliest to ripen, fully two weeks before DeSoto. Fruit large, greenish yellow, ground covered with brilliant red, turning to dark red when ripe. Suitable for the extreme North.

Brittlewood Origin Nebraska. Introduced about 1896. Fruit large, dark red, mottled with thick grayish bloom; flesh firm and of good quality. Said to be a cross of Harrison's Peach and Quaker.

Bursoto Said to be hybrid of Burbank and DeSoto. Tree characteristically Americana. Fruit large and of fine appearance; stone semi-cling; quality excellent.

Cheney Fruit irregular, oval, medium to large; color a dark and rather dull red with slight blue bloom; skin thick; flesh yellow and firm. Season early.

DeSoto Probably the most grown of any plum of the Americana group. Productiveness almost too great; tree should be thinned to prevent overbearing and improve size of fruit. Season medium. Fruit medium; orange overlaid with crimson; flesh yellow and firm; of fine flavor and quality.

Forest Garden Fruit large, nearly round, dull purplish red with thin bloom; flesh yellow, sometimes reddish next to the stone; firm, sweet and of pleasant flavor; cling. Season medium. One of the most extensively grown varieties in north-western orchards and generally reported as a profitable sort.

Free Silver (Terry) Originated in northern Iowa. One of the largest and finest native plums that has been introduced. Ripens very evenly. Resembles the Hawkeye in appearance, but it is larger in size. Quality excellent.

Hawkeye One of the largest and best plums grown in the Northwest. Fruit large, round, oval, thick skin that bears handling; color dull red over yellow; flesh yellow and of prime quality. Bears young and reported everywhere as prolific and regular.

Jewell The coming plum of the Northwest. The tree is healthy and vigorous in its growth. Fruit is the largest of any Americana plum that has yet been introduced and proved worthy. Flesh firm but juicy, and of excellent quality. Its firmness makes it a good shipper. Color a rich purplish red. Average specimens run five inches in circumference. Hangs to tree well, this being a very valuable feature.

Krikon Imported from Sweden in 1901. Is one of the few blue plums that can be successfully planted in southern Minnesota. The tree is upright and requires but little pruning. Branches low, well adapted to open localities. Fruit medium size; pit very small; skin thin; meat solid; very juicy and sweet.

Ocheda A variety discovered and introduced by H. J. Ludlow, Worthington, Minn., (who was also the originator of the famous Okabena apple.) Size medium; dull, finely mottled red with rather thick bloom; flesh rich yellow; sweet and rich in quality; skin medium thick and without harshness; stone semi-cling. Season medium.

Peach One of the sweetest of all the Americana plums. Size medium; color dark red. Tree hardy; excellent grower. Season medium.

Rollingstone Size medium to large, (overbears like DeSoto and should be thinned to secure large fruit); round flattened; pinkish purple, mottled and spotted, skin thick; flesh firm, sweet and excellent in quality; stone semi-cling.

Surprise Fruit large to very large; skin medium, thick, tender; bright red; flesh pale yellow, meaty, fine flavor; quality extra good. Season medium.

JEWELL PLUM

Stoddard Color pinkish red over yellow, with very small white dots and bluish bloom over all; skin thick and therefore a good shipper; flesh yellow; fairly juicy and of good quality; stone medium, cling. Season medium early.

Wolf No western native has perhaps been more generally commended than this. It is pronounced productive and regular in bearing from southern Iowa and Nebraska to Stonewall, Manitoba, and appears to be generally satisfactory. Fruit round-oval, large; color crimson over orange, prettily dotted, with bluish bloom; flesh yellow and of good flavor and quality; stone perfectly free. Season medium. Tree beautiful and symmetrical; inclined to overbear. Very popular in market.

Wyant Fruit medium to large; color purplish red, inclining to orange on shaded side; stone semi-cling; skin thick; flesh rich yellow; sometimes red next the stone; quality good, tho variable, being sometimes quite astringent.

Weaver One of the few free stone plums that are hardy enough to be commercially successful in the north. Has been well tested, under cultivation since 1875, and widely distributed thruout the northwest. Fruit, large, oval, color orange heavily overlaid with red; skin thick with light bluish bloom; flesh firm clear golden; quality rich, splendid. Season medium late.

Semi Hardy Plums

These varieties are among those most largely planted in the East and also in favored western localities. Wherever hardy, they are desirable on account of their large size, but none of them are superior to the preceding native plums in quality.

Abundance Imported from Japan. One of the best known and deservedly popular of the Japanese plums. Fruit medium to large; color bright red, almost entirely overlaying a yellow ground; flavor sweet and rich; quality good to very good. Season early.

Arctic [MOORE'S ARCTIC] A well known variety and considerably planted where hardy. Fruit medium, roundish; color black with a thin blue bloom, flesh tender, juicy, yellowish amber, very sweet; pit small, oval, nearly free. Season medium. It fruits as far north as Minnesota under favorable conditions.

Burbank Imported from Japan in 1885 by Luther Burbank. Fruit conical, large to very large; color dark metallic red on yellowish ground, skin medium, flesh yellow, firm, juicy; flavor rich and sugary. Tree very strong, wayward grower and requires frequent pruning.

Glass Fruit round, oval; size medium; color blue, with fine white dots and blue bloom; skin thick, firm; stone oval, cling; flesh greenish, meaty, yet juicy and of excellent quality.

German Prune One of the very oldest varieties known, having been grown in Europe before the beginning of horticultural history. Fruit long, oval; small to medium, color blue; flesh greenish, slightly yellow, stone small, oval, pointed, very free; quality fair to good.

Lombard Fruit oval, medium to large; color delicate purplish or reddish violet with blue bloom; flesh yellow, firm, of fair quality; stone cling. Season medium to early.

Shipper's Pride Fruit large to very large, round; color dark purplish blue, handsome. Season medium, late.

Yellow Egg Fruit in shape like a goose egg; size largest; with long stem; color creamy yellow when ripe; white bloom; flesh yellow; quality fair. Season medium.

Shropshire Damson An old English variety introduced into this country years ago. Fruit oval, size medium to small; color blue; skin firm; flesh greenish, flavor rather sour and of fair quality; good cooker.

The Compass Cherry-Plum

Probably no variety of stone fruit grown in the northwestern states has attracted more attention than the Compass Cherry-Plum. It is a cross between the Sand Cherry and the native wild plum.

The Compass Cherry-Plum is absolutely hardy. All of our stock of this variety is grafted on hardy

COMPASS CHERRY-PLUM

wild plum roots, thus making every tree "iron clad" in root and branch. (We wish here to warn planters that some growers are selling Compass Cherry budded on peach roots and Myrobalan plum stock. Such trees are worthless in this climate.)

Its early bearing is remarkable. A great many two year old trees as they stand in the nursery row are found with cherries on them and we hear constantly from buyers that many trees fruit well the

same year they are set out.

In hybridization, the Compass largely lost much of that astringency near the skin so characteristic of the Sand Cherry. The amalgamation seems to have considerably developed the tender flesh and juiciness characteristic of the cherry. In shape, size and coloring of the fruit, the characteristics of the plum and cherry are about evenly divided. When young and green the fruits have more the appearance of undeveloped plums, but as they mature they fill out and become more round like the cherry. In color it changes from green to a bright red, deepening as it becomes ripe. For canning the Compass is valuable in this latitude, and when rightly preserved makes an excellent stock for pies, puddings, sauces, etc. While it fills a unique place in the north, where it stands to-day as the principal hardy fruit approaching the cherry, it is not to be compared with the well known commercial cherries grown in our eastern and central states.

CHERRIES

The following are selected varieties, desirable for general culture in sections where they are hardy. The heart and Bigerreau are so designated and those followed by an "M" belong to the Duke and Morello class.

Black Tartarian (Heart) Very large, color purplish black; flesh mild, sweet, jelly-like. Tree a vigorous grower and immense bearer. One of the most popular. Late June and early July.

Bing Large, purple; flesh solid; quality excellent; tree thrifty; upright grower. Fruit ships well.

Early Richmond [English Pie Cherry] (M).

Probably the most popular variety of the central states. Exceedingly productive and regular in bearing where hardy. Fruit dark red, medium to large. Unsurpassed for pies, puddings, etc. June.

English Morello (M). An old and popular variety. Tree dwarf and slender. Fruit large, dark red nearly black; flesh tender, juicy, slightly acid, rich. July.

Homer (M). A valuable seedling variety originating at Homer, Minnesota. Distinctly of Morello type; fruit medium; small pit; flesh juicy, rich and of excellent quality; flavor very similar to Early Richmond; color dark red. Has attracted much attention among Minnesota growers on account of its apparent hardiness. Season medium.

Kentish (M). A variety resembling the Early Richmond, and may possibly be a seedling. Seems to be hardier and the fruit somewhat smaller. A fine pie cherry.

Luelling (Heart) Large shiny black; solid and firm; a good keeper and stands transportation well. July. (Also known as Black Republican).

Montmorency Large (M). One of the finest flavored cherries in its class. Valuable for canning and preserving; fruit large, dark red.

Montmorency Ordinaire (M). A beautiful, large, red cherry; of finer quality than Early Richmond and ripening ten days later; very prolific and is much recommended as a profitable market variety.

Napoleon Bigarreau Fruit very large and of fine appearance, color yellow and amber with bright red blush; flesh firm and juicy and delicious. Profitable for market; good for canning and dessert. July.

Sand Cherry Properly speaking, this variety belongs more among the ornamental shrubs than the cultivated cherries. We list it here as it has been found very desirable in the extreme parts of Minnesota, Manitoba, etc. Now practically superseded by the Compass Cherry-Plum which is described elsewhere in this catalog.

Ostheime (M.) Fruit large, nearly black when ripe; flesh juicy and rich, fine for both dessert and cooking; finds ready sale on all markets. One of the most productive.

Wragg (M.) Originated in Iowa and is very popular in the west. Fruit is similar to English Morello. Perhaps the nearest approach we have made to the cherry of good commercial quality that is hardy. July.

Windsor (Bigarreau) A seedling introduced from Canada. Fruit large, liver colored; flesh remarkably firm and of excellent quality. Tree very prolific; a valuable late variety. Late July.

PEARS

Where hardy, the Pear is one of the staple fruit crops. Very few marketable Pears will live thru Minnesota winters. We are, however, able to propagate first class trees in our nursery, and offer the following list of varieties now in general cultivation.

Bartlett Fruit large; color when fully ripe a waxen yellow with red blush; flesh juicy, melting, highly flavored. The tree bears early and abundantly. August and September.

Clapp's Favorite A superb, large, long, yellow pear, richly flushed with russet red on sunny side; flesh juicy and delightful in flavor and quality; ripens before Bartlett. August.

Duchess D' Angouleme One of the largest; greenish yellow splashed with russet; flesh white, juicy, rich. October and November.

Flemish Beauty A large, beautiful, melting, sweet pear. This fine old variety is still one of the most generally planted and popular everywhere. September and October.

Idaho Origin Idaho. One of the very hardiest; fruit large, handsome, with very small core; color golden yellow with russet spots; flesh juicy, with delicious vinous flavor. September and October.

Kieffer A profitable market variety on account of its good shipping and keeping qualities; of large size and fine appearance; while not of best quality it is popular and profitable on account of the early bearing, productive habit and hardiness of the tree. A favorite for canning and preserving. Most planted in the northwest. October, November.

Worden's Seckle A seedling of Seckle. Fruit medium in size, borne in clusters, juicy, fine grained with a flavor and aroma fully equal to that of its parent which it surpasses in beauty, size and keeping quality. October to December.

PEACHES

The Peach is only semi-hardy in Minnesota and adjoining states. It is a rather remarkable fact, however, that we are able to produce as fine nursery peach trees in Minnesota as can be grown anywhere in the U. S. Following is a selected list of varieties most largely recommended for general planting.

Alexander (Cling) Medium to large, color pale green flushed with deep red; flesh white, tender, juicy; one of the largest and best extra early varieties. July and August.

Champion (Free) Usually large, some specimens measuring ten inches; fruit rich, sweet, juicy, beautiful color; creamy white and crimson; a good shipper. August.

Crawford's Early (Free) A magnificent, large, yellow peach; its size, beauty and productiveness make it a popular variety. August and September.

Crawford's Late (Free) Similar to Crawford's Early but later in ripening. Fruit very large; one of the most profitable varieties in cultivation. Late September.

Crosby (Free) Of medium size and peculiar roundish-flattened shape; bright yellow splashed with carmine; flesh yellow, of good flavor. One of the best known peaches and a decided favorite. September.

Elberta (Free) A leading market variety that thrives and is productive in all peach growing sections; fruit large, bright yellow,

overspread with crimson; flesh juicy and of good quality and so firm as to ship well. The great canning peach. August and September.

Triumph (Cling) Large, yellow, nearly covered with red; flesh bright yellow, and of excellent flavor. July.

APRICOTS

The Apricots listed below are all Russian varieties that have been introduced from northern Europe, and tested in many extreme locations.

Alexander (Russian) Large, oblong, color yellow flecked with red; flavor sweet and delicate; one of the best. July 1st.

Alexis (Russian) Large to very large; color yellow with red cheek; flesh rich and luscious, slightly acid. July 15th.

Gibb (Russian) Medium size, yellow, sub-acid, rich, juicy. The best early sort, ripening with the strawberries. June 20th.

Budd (Russian) Large size, color white with red cheek; flesh sweet, juicy, extra fine; best late variety. August 1st.

QUINCE

A valuable culinary fruit. It has a delicate and characteristic flavor found in no other fruit, and by many is considered indispensable for jelly, preserves, etc.

Apple or Orange Quince Large, roundish, of bright golden color; the most extensively cultivated and one of the best.

CURRANTS

The currant is an indispensable garden fruit. It is very largely planted all over the north, and owing to its early ripening season, it is grown successfully as a commercial fruit in all sections.

RED VARIETIES

Cherry Bush vigorous, stocky and compact; cluster rather short, fruit medium large; color bright red; very thin skin; juicy and fine flavor; one of the most productive.

FAY'S PROLIFIC

Fay's Prolific

Berry averages large; juicy and less acid than Cherry; bush not quite so strong a grower.

Long-Bunch

Holland ^{One} of

the best late varieties; bush very vigorous and hardy; clusters very long; berry medium to large, bright red and of good quality.

London Market Bush vigorous, upright; fruit medium to large; color dark red, with slightly acid flavor; very productive.

North Star Popular on account of its hardiness, vigorous growth, early fruiting and productiveness. Fruit is borne on naked stems which makes easy picking.

Perfection The latest introduction, being a cross between Fay's Prolific and White Grape, combining the best qualities of both. Berry bright red and large. The clusters average longer and the size of berry is maintained to the end of bunch. In quality it is said to be superior to anything in the market to-day, being of a rich, mild sub-acid flavor with plenty of pulp and few seeds.

Pomona (Knight's Improved). Deserves prominence for its splendid market qualities. The fruit is of good size and flavor, bright red in color. Has long stems and hangs in fine condition long after ripening.

Prince Albert Bush vigorous, very upright in habit. Clusters short to medium. Berries large, red, with thin skin; juicy and of high flavor. Immensely productive. A late variety, highly valued at canneries because of its good size, thin skin, flavor and juiciness. Makes fine jelly.

Red Dutch An old and well known standard variety. Bush is a strong, upright grower and productive everywhere.

Victoria Clusters about medium length; berries medium to large; bright red with mild acid pulp. One of the most valuable varieties; very productive. Late.

Wilder A remarkable variety. Very productive; bunches and berries large; splendid quality. Superior in every way to the common sorts.

WHITE VARIETIES

White Gondoin A large, light colored sort, of good flavor and quality; bush vigorous and productive.

White Grape Bush vigorous, somewhat spreading, productive; clusters long; berries large; of very attractive color, mild flavor and good quality; a good table variety.

White Imperial Mildly acid and pleasant in flavor; clusters larger and longer stemmed than White Grape. The best of the white currants and the best of all currants for dessert use.

BLACK VARIETIES

Black Champion Bush vigorous and productive; fruit averages above medium; pulp nearly sweet and mild flavor. A desirable variety for general culture.

Black Naples A vigorous, upright grower and moderately productive fruit averaging above medium; pulp acid with strong flavor; an old and well known variety.

Lee's Prolific An old and always popular English variety. The bush is short, robust and enormously productive; berries average larger than Black Naples; acid and of good quality for cooking; one of the hardiest.

Black Victoria An English variety of exceptional merit; probably the largest black currant in cultivation; very productive and the berries are of extraordinary size and good flavor.

GOOSEBERRIES

The Gooseberry, like the Currant, is a favorite in the Northern fruit garden. Gooseberries are grown with but very little care. All they require is some attention to fertilizing and cultivation, with an occasional spraying.

AMERICAN VARIETIES

The following varieties are recommended for Minnesota and the North.

American Owing to its extreme hardiness it is very popular in the latitude of northern Minnesota, Manitoba, etc. Fruit small to medium, red when ripe; very productive.

Carrie Originated in Minnesota. Fruit red. After the third year, bush loses its thorns; very heavy bearer, medium size; excellent quality.

Downing A seedling of Houghton. Large and handsome, pale green berry; of splendid quality for dessert or cooking. Bush vigorous and exceedingly productive. Excellent for family use and profitable for market.

Houghton An enormously productive and always reliable, old variety. Of vigorous growth, slender and spreading, not subject to mildew. Fruit of medium size, smooth, pale red, tender and of good quality. About equal in hardiness to American.

Pearl Similar to Downing but fruit generally reported a little larger. Said to be a cross between an English and American variety. Very hardy; free from mildew and productive, even more so than Downing. Superior in size and quality

PEARL

Red Jacket (Josselyn). Bush is very hardy, clean, healthy foliage, vigorous and entirely free from mildew. Fruit large, smooth, red and of first-class flavor and quality.

Transparent A strong and vigorous grower of superior quality. A popular variety in the north. Free from mildew. Season medium; size large.

ENGLISH VARIETIES

Under favorable conditions, the English varieties are quite successfully grown in this country but are not recommended for extreme sections of the Northwest.

Crown Bob Fruit large, roundish-oval, red, hairy, first quality; very handsome.

Keepsake Fruit very large, straw colored, of excellent flavor. Very productive and one of the earliest to ripen.

Industry Very large; productive; red; excellent quality.

GRAPES

BETA

The grape is an article of food as well as a luxury. Some varieties may be successfully grown in every state. In Minnesota, many of the standard grapes may be fruited, a very little attention being given to winter protection.

Black and Purple Varieties

Beta A hybrid of wild grape, probably crossed with Janesville, having same hardness and general qualities of the wild grape. Has perfect flowers, may be depended upon to bear fruit when properly trained. Fine for wine, jellies, etc.

Campbell's Early Bunch large shouldered, moderately compact; berry large, nearly round, covered with profuse light blue bloom; skin thick and does not crack; flesh sweet with slight aroma. Ripens very early.

Concord The most popular grape in America. Bunch large shouldered, compact; berries large, covered with a rich bloom; skin tender but sufficiently firm to carry well; flesh juicy, sweet, pulpy and tender.

Early Ohio Bunch medium to large, compact; berries medium; quality fair. Ripens with Moore's Early. Vine healthy and productive.

Janesville Has long been regarded as the hardiest of cultivated grapes. Originated in central Wisconsin. Bunch medium, very compact; berry medium, skin thick; flesh pulpy, moderately juicy and highly flavored. Very strong rank grower and very productive.

Moore's Early Bunch large shouldered, medium to large; berries much like Concord in flavor and quality but average larger. Ripens so early as to be nearly out of market before the Concord.

Wild or Frost Grape A vigorous tall climbing species, with bright green foliage. The leaves are thin, medium to large, the edges deeply toothed. They ripen late, even after frost. This is probably the most wide spread of American native grapes and, with its varieties, is the most often found in the woodlands of the Northwest.

Worden Bunch large, compact; berries very large, skin thin. By some thought to be superior to Concord; ripens earlier. Stands shipping as well.

RED VARIETIES

Agawam Red or maroon. Bunch usually loose. Berries large; skin thick; flesh pulpy, meaty, juicy, of a rich, peculiar, aromatic flavor. Ripens about with Concord and is a good keeper.

Brighton Bunch and berries medium to large, long, compact; skin thin; flesh tender, sweet, with scarcely any pulp; and is conceded one of the best early red grapes. Should be planted with Concord, Worden, Martha or other varieties which blossom at the same time. Ripens with Delaware.

Delaware This is regarded by many as the best American grape. Bunch small, compact; berries small; skin thin but firm; flesh juicy, very sweet and refreshing, and of the highest quality and flavor. Ripens with Concord or a little before.

WHITE, YELLOW AND GREEN VARIETIES

Lady Bunch medium, compact; berries large; skin thin. Ripens early and is moderately productive. Requires rich land and high culture.

Martha White, sometimes turning pale yellow when fully ripe; bunch and berries medium, compact; skin thin, tender; flesh very sweet; quality excellent. Ripens with Concord.

Niagara Bunch very large and handsome, compact; berries large, round; skin thin, tough, does not crack and carries well. Melting, sweet, with a peculiar flavor and aroma, agreeable to most tastes. Ripens with Concord.

Pocklington Pale green, usually with tinge of golden yellow on sunny side; bunch and berries large, very compact; flesh juicy, sweet, with considerable pulp. Produces a heavy crop of fine, showy clusters and is very popular on the market. A seedling of Concord, ripening soon after it and considered its equal in quality.

RASPBERRIES

The Raspberry is a valuable and easy grown garden fruit. It is successful in most northern states and unsurpassed either as a fresh fruit or for preserving.

RED VARIETIES

Brandywine A large, bright red raspberry; very valuable for market on account of its fine shipping qualities. Ripens evenly and is very firm. The canes are vigorous and healthy.

Clark A strong grower. The fruit is medium to large, conical; color bright crimson; highly flavored, juicy, sweet and of excellent quality.

Cuthbert (Queen of the Market). Canes are tall, vigorous and enormously productive. Berries medium large, conical, rich crimson, firm and a good shipper; flavor rich and of good quality.

Herbert Very hardy; produces heavy crop of most delicious fruit. Berry large; bush thrifty; of recent origin. Has been awarded many medals. Does well where other varieties fail.

KING

King Many of our leading fruit growers consider this one of the best of the early red raspberries. Berries large and attractive, bright red in color and of good flavor. Ripens with the earliest and is firm enough to ship well. The canes are healthy and productive. Very hardy.

Loudon Its large and beautiful, productive, rich, dark crimson berries are of fine flavor and quality. Ships well, and vigorous in growth.

Marlboro One of the largest early red raspberries. The berries are a beautiful red scarlet and of good quality. Canes are vigorous and productive. A standard variety.

Miller Bright red berries, averaging large, round in shape and of fine quality; one of the firmest and best shippers for early market and is grown extensively in many sections.

Minnetonka (Ironclad) Originated near Minneapolis. In that and other localities is a great success. Said to be a heavy bearer; fine quality; good shipper; considered hardy.

Sunbeam (South Dakota) Originated by Prof. Hansen of the Experimental Station Brookings, S. D. Said to be the most hardy red raspberry grown. Very heavy foliage; is a shy bearer; quality fair; medium size. Not desirable where other and better varieties can be grown.

Turner Like the Cuthbert, this old variety is still a favorite and has an established reputation as a profitable market variety, owing to its good size and fine appearance and its great productiveness.

LOUDON

Raspberry Novelties

The following varieties are of more or less value for their fruit and also have distinct value for ornamental planting.

Japanese Wineberry The canes are large, robust and entirely hardy. The leaves are large, dark green above and silver gray underneath. Each berry is at first enveloped by the large calyx forming a sort of burr which is covered with the purplish-red hairs, giving it somewhat the appearance of a moss tree. This burr soon opens and reveals the rich wine colored berries which are of a sprightly acid flavor and of good quality. The seeds are so diminutive as to be hardly noticeable.

Strawberry Raspberry (Rubus Sorbifolius). A variety introduced from Japan which has been much over advertised altho it is an interesting novelty. It is really a dwarf raspberry, having nothing of the strawberry in its composition. Fruit is the size and somewhat the shape of a strawberry. Color a brilliant crimson; flavor fair but not desirable.

Siberian Bramble (*Rubus Xanthocarpus*). A rare trailing bramble recently introduced from Siberia by Prof. N. E. Hansen from whom we procured our original stock. Very vigorous, with the handsome foliage characteristic of the *Rubus* family. The fruit is large, a beautiful golden yellow in color, juicy, sprightly acid and of fair eating quality. A deep rooter and rapid traveler. Valuable for rocky or gravelly hillsides.

BLACK VARIETIES—"BLACK CAPS"

Cardinal Exceedingly productive; fine flavor. A choice variety for table, canning or market; very vigorous grower. Sometimes called the Tree Raspberry.

Cumberland Very large and very similar to Gregg in quality and firmness. In productiveness it is unexcelled.

Gregg One of the oldest and best known black caps and is still one of the most largely planted varieties. In size the fruit averages large and regular crops are to be depended upon. Under good cultivation yields enormously. It is an excellent shipper and commands a good price on the market.

Ohio (Early Ohio). Very productive and for canning or evaporating one of the most profitable. Berry not quite as large as Gregg but of fine quality.

Older A recent variety which has been receiving considerable attention in the Northwest. Ripens a trifle in advance of Gregg. Jet black, sweet and of excellent quality. Adheres well to the bush.

Palmer Splendid quality, vigorous grower, heavy bearer, good shipper. As good as the best for home or market use. This is one of the new varieties which has been especially recommended by horticulturists and market gardeners and we predict for it a splendid success and demand. A few should be planted in every home garden.

PURPLE VARIETIES

Columbian At this time regarded as the best variety of the class. Very large, dull purple when fully ripe and moderately firm. It is an improvement on Shaffer in color and firmness of berry while retaining its delicious flavor. The bush is very vigorous and grows to such great size that it should have extra room. Unexcelled as a market berry and valuable for all culinary purposes.

Shaffers A standard variety; favorably known; hardy and productive; fruit large. Excellent for canning.

YELLOW VARIETIES

Golden Queen A seedling of the Cuthbert and fully equal to that variety in vigor of bush and productiveness. The fruit is large and of excellent quality; color, pure golden yellow which makes it very attractive when served alone or mixed with red berries of other varieties. Ripens with Cuthbert; firm and a good market variety.

BLACKBERRY

The Blackberry is a native fruit in all the northern states. The following cultivated varieties are improvements over the wild berry. Most of them are larger and sweeter. It is one of the hardiest garden fruits in the catalog.

Ancient Briton A reliable market variety of medium size and of best quality. One of the hardiest. Berries large and sweet. Sells well on the market and is a very profitable variety. It is one of the best known and most planted varieties in the North Central states.

Badger Very prolific; is a vigorous grower. Fruit excellent quality; desirable, one of the best.

Eldorado Of late introduction, being vigorous and hardy in most localities. The berries are large, coal black, flavor sweet and melting and have no hard core. Very firm and therefore an excellent market variety.

Rathbun The berries are sweet, very large and luscious, have no core, yet are firm enough to ship and handle well. Forms a compact bush and is very productive where hardy.

SNYDER

Stone's Hardy The canes are upright; berries are of medium size, juicy, sweet, of fine flavor and good quality. For either market or domestic use, Stone's Hardy is a dependable variety. Its hardiness will always hold for it a place in the estimation of the northern planter.

Snyder Also one of the best blackberries for market in the North and in hardiness second to none. The canes are vigorous and annually productive. Tho the berries are medium in size, they are very sweet, juicy and of superior quality. It also lacks the hard core found in some varieties.

DEWBERRIES

The Dewberry is a dwarf, trailing form of the Blackberry. Where it is grown successfully, the fruit of the Dewberry is highly prized on account of its low growing habit. It is easily covered for winter protection.

Lucretia One of the most widely planted of the Dewberries. It is a strong grower and exceedingly productive. The fruit is large, luscious and handsome; glossy black. Ripens about the middle of July, according to locality.

Windom This variety is the one mostly planted in the North Central states where it has proved to be the most hardy. It is very handsome when in blossom. The fruit is superior for cooking, canning and preserves; and if left on the vine until well ripened is one of the best for dessert and will hang on ten days or more after turning black.

STRAWBERRIES

The Strawberry is perhaps the most popular small fruit cultivated in the North. As is well known, many of our best varieties of Strawberries have imperfect or sterile blossoms. For this reason, when planting such varieties it is necessary to alternate them with staminate or perfect varieties in order that the blossoms may become fertilized. In the following list, the buyer will therefore find such varieties designated as either perfect or imperfect. In our list we have aimed to include those varieties that by actual test have proven the most valuable in average locations.

Aroma (Perfect). This late variety is very profitable in some sections. The berries are very large and uniform in size and appearance; light red, of medium firmness and of good quality. It is a good grower and throws out strong runners.

BEDERWOOD

Bederwood (Perfect). This is generally considered one of the very best varieties for profitable culture in the West. Is valuable either for home use or market. The fruit is large, round-conical, bright scarlet, moderately firm and of fine quality. The plant is vigorous and immensely productive. A valuable early variety and conceded by growers as one of the best to plant with Warfield and other imperfect varieties of the same season.

Bubach (Imperfect.) An old and reliable variety that has been under cultivation for many years. Fruit large and handsome, roundish-conical, bright scarlet, moderately firm and of fair quality. Plant a strong grower, with large, healthy foliage and very productive. Succeeds on either light or heavy soil. Desirable for home use and nearby market. Season early to medium.

Clyde (Perfect). This is proving to be one of the most popular of the lately introduced varieties. It seems to do equally well in all parts of the country and on all soils. In season it is early to medium according to locality. The berry is of splendid quality and one of the very best for home use. Large in size.

Crescent (Imperfect). Another one of the old time varieties that is still much planted on account of its vigor and productiveness. The fruit is large, conical, bright scarlet, flesh moderately firm; quality excellent. Ripens early. Its growth is very vigorous. Very productive when properly fertilized.

Enhance (Perfect). Color dark red, conical in shape; very fine eating; heavy bearer, quality good. Splendid shipper; berry fine.

Haverland (Perfect). Originated in 1882 and has therefore been well tested. It is very productive and a good drought resister on account of the vigor of its root system. The berries are firm, uniform in shape and bright red in color. Flavor excellent. Early to medium. Ripens its fruit evenly and holds size well thru the season.

Jewell's Improved A seedling of the Miller; fruit large, uniform in size; dark red. Variety perfect; excellent quality. A good shipper; meat solid; splendid for home or market use. Heavy bearer.

CRESCENT

Lovett (Perfect).

An old standby variety. It is an enormous yielder of medium sized berries. These are attractive in color and form; are firm and fine shippers. Early to midseason. A vigorous grower on all soils.

Miller (Perfect).

In some localities regarded as a standard variety. The fruit is very large, roundish, quite uni-

form and of fine flavor. The plant is also a splendid grower, with large, luxuriant foliage that affords abundant protection to blossoms and fruit. Midseason.

Palmer (Perfect.) An early variety successful where grown; vigorous plant growth. Berries of good size and market quality; excellent flavor.

Ridgeway (Perfect). Quality the best. Regular and heavy bearer; fruit large, firm and ships well.

Rough Rider (Perfect). It is a good runner and enormously productive. Berry very large, color bright red. Its great firmness is the cause of its popularity as it makes an unexcelled shipper. It is also a late berry, which in connection with its large, even size places it among the list of most valuable varieties.

Sample (Imperfect). In many places this is the leading late berry. It seems to succeed best on rather heavy soil. The plant is large and a vigorous grower. The berries are large and continue large thruout the season; roundish-conical in form, attractive in appearance, fairly firm and of decidedly pleasant flavor.

Senator Dunlap (Perfect). One of the great market berries. Has now been well tested and proven wonderfully prolific and profitable everywhere. Plant resembles Warfield, is a rampant runner and should be restricted. One of the best in dry seasons. Fruit medium to large, regular in form, color bright, beautiful red, glossy; exceptionally firm, making a splendid keeper and shipper. Quality first-class; ripens early and continues a long time. Midseason.

Splendid (Perfect). Another large, all season berry that has been much planted of late years. In growth it is healthy and luxuriant, making good, thick rows and with plenty of foliage. The fruit is large, a handsome deep red and far above the average in both quality and appearance. In general locations it bears thruout the season.

Warfield (Imperfect). A seedling variety discovered in 1883 and is still one of the most largely planted strawberries. Plant is a vigorous grower with long penetrating roots, and is thus a great drought resister. In appearance, much like Senator Dunlap and had no rival until the introduction of that variety. It is very largely planted with Bederwood as a fertilizer. The plant is smaller than most other well known varieties. Midseason.

Wolverton (Perfect). A good pollenizer with large, bright, clean foliage and is successful on all soils. The berries are medium to large, symmetrical. As a table berry it has few equals as the flavor is splendid and delicious all thru. It is a splendid variety for the kitchen garden, but too tender to make a good market sort. Early.

JUNEBERRY

The Juneberry is a desirable fruit in the Northwest. The well known Dwarf Juneberry found indigenous in the latitude of Minnesota is prized by all who are familiar with it. An improvement on this has now been made and we have a variety known as the "Success" which maintains the characteristic hardness of the native variety and has a much larger and finer flavored fruit. In order to keep these pure, we graft them on hardy crab roots. The flowers of the Juneberry appear about the same time as the apple. Its leaves are large, glossy green and very handsome. It is also valuable for ornamental purposes and is much used by northern landscape gardeners in groups of shrubbery. The fruit is round, of a beautiful reddish purple which becomes a bluish black when fully ripe. In flavor it is somewhat similar to the Huckleberry; mild, very rich, sub-acid. When thoroly ripe it is excellent served with cream and sugar. It is also valuable as a canning berry for winter use and makes splendid pies. It is extremely fruitful and regular in bearing. May be depended upon to produce a good crop annually. Perfectly hardy; needs no protection or special treatment.

ASPARAGUS

The Asparagus is one of the oldest and one of the most delicious of our garden varieties. A small bed in the kitchen garden will supply the family with this early spring vegetable in a fresh condition impossible to procure on the market.

Barr's Mammoth An old and valuable English sort that is very popular. Very large in size; fine for market or home use.

Conover's Colossal Is probably the best known as it is the oldest named variety under cultivation. It is still said to be the most reliable in some locations as it is very vigorous and keeps the bed full of strong shoots.

Columbian Mammoth White A distinct variety of mammoth size, great yield and superior quality. Remarkable for the clear whiteness of its stalk which retains the clearness of its color until several inches above the surface.

Palmetto Is no longer a new variety. Where well grown, with proper mulching, it produces shoots of large size and exceptionally tender. Delicious in quality.

RHUBARB

A valuable early spring vegetable, the use of which is universal. The following are the best varieties now in cultivation.

Excelsior A long growing and tender variety, with tender skin. Especially valuable for preserving.

Linnaeus One of the oldest and best known varieties; vigorous and productive.

Queen The extra long, tender stalks are of a decided pink color and delicious for canning or cooking.

Sweet Wine A later improvement on Linnaeus. A strong grower and very tender; of splendid flavor.

Victoria A prominent English market sort, strong and with extra long stems.

HORSE RADISH

This popular plant was introduced to this country from Great Britian at an early date and its cultivation forms an important industry in many sections too well known for further descriptions. We offer strong roots which should be planted in the spring.

DECIDUOUS TREES

So varied are the purposes to which are put the shade and ornamental trees, and so widely different in character are the trees themselves, that it is difficult to adopt any system of cataloging that will be a safe guide in all sections of the country. This is not only true as regards hardiness but also as regards height and general behavior. The most of the varieties we list are hardy and successful in the latitude of Minnesota; in fact many of them are natives. Others, however, are only semi-hardy in this section altho they are often successful in retired or protected location.

As to height, we have adopted the following broad classification which will give a fair idea of the comparative size of the different species listed.

Lg. Trees usually attaining a height of fifty feet or more at maturity.

Med. Trees usually less than fifty feet and more than twenty-five feet at maturity.

Sm. Trees commonly less than twenty-five feet at maturity.

ASH—*Fraxinus*

White Ash. (*F. Americana*). Lg. A well known timber tree. It attains a large size and is of great value for timber. A good street tree in many sections, is a rapid grower. It produces a broad, round, head and has a straight clean trunk. While young, its foliage has a remarkably soft and mellow appearance.

GREEN ASH

Green Ash. (*F. lanceolata*). Lg. This species is of the greatest value in the prairie states of the Northwest. Altho not so tall a grower nor so rapid in growth, it is much harder and better adapted to

the extreme conditions of this section. It is valuable for street planting as a shade tree and for all kinds of prairie timber culture. Somewhat resembles *F. Americana*. Grows very fast when young and before it produces seed, after which its growth is slower.

ASH, PRICKLY—*Xanthoxylum*

Prickly Ash, Tooth-ache Tree. (*X. Americanum*.) Sm. This is the only species indigenous or hardy in the North. The foliage is compound and quite pretty in its effect. The yellowish green flowers appear before the leaves. The thorns of this species are very numerous and stout. They make it a valuable variety to grow in thickets and fences to turn stock and for other defensive purposes.

WEeping CUT-LEAF BIRCH

BIRCH—*Betula*

The Birches number among them some of our most beautiful and useful native trees. They are indispensable in park and

lawn planting, and are also receiving more and more attention for street uses. It is primarily a tree of the North; in fact, no trees grows farther North than the Birch.

American White Birch, Poplar Birch. (*B. populifolia*). Med. A small or medium sized, graceful tree. Thrives well in even poor and dry soils. The bark is a grayish white.

European White Birch. (*B. alba*.) Lg. A graceful tree with silvery bark and slender branches. Quite erect when young, but after four or five year's growth assumes an elegant drooping habit. A successful tree even on light soils.

Weeping Cut-Leaf Birch. (var. *pendulalaciniata*) Lg. This magnificent tree is, without question, the most popular and the most planted of all pendulous or so-called weeping trees. It is a tall, slender tree, yet of vigorous growth. It has an erect central trunk, somewhat pyramidal in shape with graceful, drooping branches and white bark on all the old wood. The foliage is fine, thin, deeply and delicately cut; and of a beautiful shade of green.

BOX ELDER—*Acer*

Box Elder, Ash-Leaved Maple. (*A. Negundo*.) Med. to Lg. This tree is almost too well known in the west to need description. It has probably been more planted in the treeless portions of this country than any other, with possible exception of the Cottonwood. Its vigorous growth and tenacity give it unequaled advantages in dry or exposed locations, such as are common in the Northwestern States.

BUTTERNUT—*Juglans*

Butternut, White Walnut. (*J. cinerea*.) Very much resembles the Black Walnut. It is a moisture loving tree and succeeds best on low rich soils. The nut is of milder and considered by many, of better quality. A broad, open top tree, with light green, compound foliage and gray bark.

CATALPA

Eastern Catalpa. (*C. bignonioides*.) Med. It is a spreading irregular tree, with very large, heart-shaped leaves and pyramidal clusters, often a foot long, of white and purple fragrant flowers. Blooms in the latter part of June.

Western Catalpa. (*C. speciosa*.) Med. to. Lg. This is a very desirable ornamental tree, closely allied to *C. bignonioides* but taller and much hardier. Its blossoms open two weeks earlier. It has large, luxuriant foliage, eight to twelve inches long. The flowers are borne in showy panicles.

CRAB—Pyrus

Pyrus ioensis. (var. Bechtel's Flowering Crab.) Sm. One of the most ornamental varieties in the Pyrus group, and also one of the hardiest. Originated in Iowa. It is a better grower than the parent type, with good foliage. The flowers are double and very beautiful. They are a delicate blush or shell pink color and highly perfumed. This variety should appear in every collection where it is hardy.

ELM—Ulmus

American White Elm, Water Elm. (U. Americana.) Lg. One of the most largely used trees for street planting and as a shade tree for lawns and parks. It is the most characteristic tree of this region and one of the most beautiful. Its habit is at once majestic and graceful, and the wide spreading tree, borne usually at a considerable height on a straight and shapely trunk, affords ample shade and shelter.

Cork Elm, Rock Elm. (U. racemosa.) Med. to Lg. A valuable and picturesque species, very different from Americana. It is almost regular in form, with short, stout, twiggy branches. All the bark on wood two years old and older is thickly and irregularly corded. The foliage is large, oval and very handsome.

Slippery Elm, Red Elm, Moose Elm. (U. fulva.) Lg. This species forms a broad, open, flat top tree with spreading branches.

Weeping American Elm. (var. pendula.) Med. A picturesque type of irregular growth with pendulous branches, more pronounced in their drooping habit than U. Americana. Should not be confused with the Camperdown Weeping Elm which is more pendulous and more uniform.

HACKBERRY—Celtis

American Nettle Tree. (C. occidentalis.) Med. A rare native tree, with wide spreading head and numerous slender branches. The bark is thick and rough. The leaves are about the size and form of the apple tree, but more pointed and of a bright, shining green. In general appearance it very much resembles the Elm.

KENTUCKY COFFEE TREE

Gymnocladus

G. Canadensis. Med. A rare tree, native in parts of Minnesota, and also in South Dakota. It is

a striking and ornamental tree with regular open top and twigless branches. Rough barked. It has broad, compound foliage of a singular bluish green color. Bears white flowers in loose, open racemes.

LARCH—*Larix*

EUROPEAN LARCH

European Larch.

(*L. decidua*)
Lg. An upright, conical grower, in general form resembling the Spruce, and one of our most beautiful lawn trees. In the summer when it is covered with its new, soft, feathery, light green foliage, it is strikingly beautiful. Again in the autumn it is very beautiful as its

needles turn a golden color before falling.

LOCUST, BLACK—*Robinia*

Black Locust. (*R. Pseudacacia.*) Med. A well known and very ornamental native tree, with compound leaves and graceful, spreading habit. The pea-like flowers are borne in drooping racemes, white and fragrant. These are followed by two-valve, bean-like seed pods. It is a rapid growing, vigorous tree, giving ornamental effect soon after planting.

LINDEN, BASSWOOD—*Tilia*

American Linden, Basswood. (*T. Americana.*) Lg. A well known, stately tree with large, heart-shaped leaves of a pleasing green color. A vigorous grower of pyramidal habit when young but eventually a large, round headed tree. A valuable lawn tree and should be more used for this purpose.

EUROPEAN LINDEN

European Linden. (*T. ulmifolia*). The leaves are small, thin, cordate, green above and silvery beneath. It is in every way a distinct and desirable ornamental tree, particularly adapted to small grounds.

MAPLE—*Acer*

Ginnala Maple. (*A. Ginnala*). Sm. A graceful, shrub-like tree with handsome foliage which turns to a bright red in autumn. One of the most beautiful and brilliant of autumn coloring trees, and is much used as a substitute for the Japanese Maple where that is not hardy.

Norway Maple. (*A. platanoides*). Lg. A fine and handsome tree from Europe, with round, spreading head. The leaves turn a pale yellow in autumn, often highly colored; especially in the case of some of its varieties. In the milder sections this rivals the native Hard Maple as a street tree.

Schwedler's Purple Maple. (Schwedler's.) Med. The young shoots and leaves are of a bright purplish and crimson color. They change to a purplish green in the older leaves. A most desirable ornamental tree for the contrast of its foliage.

Silver Maple, Soft Maple. (A. saccharinum.) Lg. A well known ornamental tree, with wide spreading, slender branches. Has been much used as a street tree. If exposed to severe wind, the limbs are often broken in the crotches; but this may be largely overcome by occasionally "heading in" the branches and retaining the central shoot as much as possible. It is valued for windbreaks on account of its quick, upright growth.

Sugar, Hard or Rock Maple. (A. saccharum.) Lg. A beautiful and always popular tree, growing on a smooth trunk and forming a dense, oval head. The foliage is large and handsome and of a rich pleasing green, turning to beautiful shades of orange yellow and red in the autumn. In soils where it is thoroly at home, it makes a splendid and uniform street tree, and it is adapted to nearly all kinds of soil.

Wier's Cut Leaved Silver Maple. (var. Wieri.) Med. This distinct variety is one of the most beautiful of our hardy trees, having cut or dissected foliage. Its growth is rapid, the shoots slender and drooping, giving it a habit almost as graceful as the Cut-Leaved Birch.

MOUNTAIN ASH—Sorbus

American Mountain Ash, Dogberry. (S. Americana.) Med. A compact, oval headed tree, with dark green, compound foliage and showy clusters of bright red berries. It is very similiar to S. Aucuparia but of coarser growth.

European Mountain Ash, Rowan Tree. (S. Aucuparia.) Med. A round headed tree, twenty to forty feet high and occasionally more. It is ornamental all thru the season. Its compound, pinnate foliage is soft and handsome in appearance and of a fine shade of green. In May and June the trees are covered with the large flat heads of pure white flowers, four to six inches across. These are followed by clusters of bright orange and red fruits which adorn the tree long after the frost has denuded it.

Oak-Leaved Mountain Ash. Sm. A hybrid variety of very distinct habit. It is very handsome lawn tree, of dense, pyramidal form. The leaves are different from the other Mountain Ashes, being

entire instead of compound; dark green above and tawny beneath, deeply lobed at the base, sharply toothed toward the apex.

Weeping Mountain Ash. (var. *pendula*.) Sm. The best tree of the extremely pendulous type for the North. The fruit and flowers are identical with *S. Aucuparia*. In habit, however, it is decidedly drooping, the branches taking an almost directly downward growth.

MULBERRY—*Morus*

Russian Mulberry. (var. *M. alba. Tartarica*.) Sm. As commonly seen, it is a low growing, bushy topped tree, with small and much lobed leaves. The foliage is very successfully used as food for silk worms.

OAK—*Quercus*

Burr Oak, Mossy Cup Oak. (*Q. macrocarpa*.) Lg. One of our finest, native, ornamental Oaks, and a magnificent tree in every location.

Pin Oak. (*Q. palustris*.) Lg. Of late years has been much used in the East for avenue planting. The leaves are deeply pinnate, sometimes almost to the midrib. It is a fibrous rooted tree and transplants well. Branches are rather short and spreading, forming a symmetrical, pyramidal head, tho more irregular as they become older.

White Oak. (*Q. alba*.) Lg. A beautiful park tree where space can be allowed for its full development. It has stout, spreading branches which form an open head. The bark is light gray.

POPLAR, ASPEN—*Populus*

The Poplars are a very important class of trees, especially in the prairie states of the Middle West where their rapid growth makes them popular for many purposes.

Balm of Gilead. (*P. balsamifera* var. *candicans*.) Lg. A good street tree and it is probably the best of the Poplars for the shade. Well grown trees have the darkest and richest foliage of any common Poplar and this character makes the tree valuable in heavy groups about the border of a place.

Caroline Poplar, Russian Poplar,

Lg. A very distinct tree in habit of growth and making a straight upright, somewhat pyramidal head. It is of extremely rapid growth, straight and regular in habit, which fact makes it particularly desirable as a quick growing street tree. The foliage is large, thickly borne, bright and glossy. It grows rapidly and in almost every soil, and yet it possesses strength and durability which most of the Poplars lack.

Canadian Poplar. (*Canadensis*.) This Poplar is related to the hardy Cottonwood—resembles it somewhat in its habit of growth. It is extremely hardy. It grows as far north as Edmonton in northern Alberta. The tree is especially adapted to severe and exposed localities, is more desirable than the Cottonwood because it does not shed cotton and is more shapely in its form and general growth.

Cottonwood. (*P. deltoides*.) Lg. Has long been a popular tree in the Western States, particularly in the prairie sections. It is probably the best known and most planted of any of the Poplars. Its greatest value is in its extreme hardiness and rapid growth.

Lombardy or Italian Poplar. (*P. nigra* var. *Italica*.) Lg. A unique and conspicuous tree on account of its erect columnar form. An extremely rapid grower and, for certain purposes in landscape gardening, an indispensable tree. It is remarkably striking and picturesque when grouped with other trees in order to produce an irregular sky-line.

Norway Poplar. Sometimes called the "Sudden Saw-log." Very hardy, rapid grower. Resembles the Carolina and Canadian, yet has a distinct appearance in leaf and shape of tree. Planted heavily on prairies and where a quick growing tree is wanted. More desirable than the Cottonwood and equally hardy.

Silver Poplar. (*P. alba* var. *nivea*.) Med. The commonest and hardiest type of the Silver or White Poplar. It is sometimes called Silver Maple from the resemblance of the foliage to that of the Maple. In ornamental planting it is particularly useful on account of the striking foliage effect. The under side of the leaves are a clear silvery white, contrasting remarkably with the dark green of the upper surface.

WALNUT—Juglans

Black Walnut. (*J. nigra*.) Lg. One of the noblest trees of the American forest. The wood is of well known value for cabinet making and interior finish. It is becoming scarcer annually and in many sections walnut groves are being established for the timber crop.

WILLOW—Salix

Golden Russian Willow, Yellow Willow. (*S. vitellina* var. *aurea*.) Lg. At the present time one of the most planted of all Willows and a very important tree, both from an economical and ornamental standpoint. It makes a round topped tree of sym-

metrical form. One of its strongest ornamental features is the bright, clear, golden yellow bark which offers a pleasing contrast wherever it is used.

Laurel Leaf or Bay Leaf Willow. (*S. pentandra*.) Sm. An ornamental variety of upright growth, forming a round head. Bark is brownish green. Foliage is a deep shining green, closely resembling that of the Laurel. Thrives equally well on high or low ground. An especially desirable variety to plant near the water.

Niobe Weeping Golden Willow. (*S. vitellina* var. *pendula nova*.) Med. A weeping or drooping form introduced from Europe by the South Dakota Experimental Station. It has graceful, drooping branches, and is of regular habit. The Station Bulletin says of it. "One of the most promising novelties in recent years as there is need of a strictly hardy, weeping willow in the North for lawns, parks and cemeteries.

Wisconsin Weeping Willow. (*S. Babylonica* var. *dolorosa*.) Med. This is a variety of the above which is of particular value in the North as it is much hardier and seems otherwise better adapted to the extreme conditions of this section. It is of drooping habit tho not so pronounced as the Kilmarnock type.

White Willow, Grey Willow. (*S. alba*.) Lg. A large tree with short and thick trunk. The branches are yellowish brown and the leaves an ashy gray and silky thruout, giving a white appearance to the whole tree. Popular as a rapid growing ornamental tree for lawn and street planting in exposed locations.

Cone Bearing Evergreens

From the standpoint of the horticulturist, the Conifers or cone bearing Evergreens take a very prominent place among the material for landscape gardening effects and in their more practical use as windbreaks. Their evergreen habit—for all except the Larches and Ginkgos are evergreen—and their conical form, especially in the early periods of life, with a branch system persisting to the base for a long time, are the elements which make them desirable.

KEY TO SIZE

Lg. Trees usually attaining a height of fifty feet or more at maturity.

Med. Trees usually less than fifty feet and more than twenty-five at maturity

Sm. Trees commonly less than twenty-five feet at maturity.

CEDAR, JUNIPER—*Juniperus*

Juniper Savin. (*J. Sabina* var. *prostrata*.) A unique, dwarf Evergreen of prostrate or almost creeping habit. It thrives in light and poor soil and is very suitable for rock work. One of the finest shrubs for low growing hedges that is hardy in the

North, and it can be sheared closely and kept low and in good form. The foliage is a very dark, deep rich green, very fine and compact.

Red Cedar. (J. Virginiana.) Lg. The Red Cedar is indigenous thruout Minnesota and the entire North-west. It is of conical form and quite regular, densely branched, the foliage being of a thick and of a rich deep green. The bark on the trunk and the branches is a pronounced reddish brown. In the fall the branches are thickly hung with pretty, little blue berries.

FIR—Abies

The Firs are of characteristic, tall, pyramidal habit and, altho resembling the Spruces in form, they are more regularly symmetrical. They are nearly all native of the northern country and more handsome in cultivation than in their native soil.

Balsam Fir. (A. balsamea). The best known species of this class. It forms a slender, spiral and very symmetrical pyramidal tree. It is one of the most rapid growing trees in the Conifer group, and in mixed plantings particularly it is very valuable for windbreaks and screens. The foliage is very dark green with short soft needles which have a pleasant aromatic fragrance.

HEMLOCK—HEMLOCK SPRUCE

Tsuga

Common Hemlock or Hemlock Spruce. (T. Canadensis.) Lg. The general description above should really be applied to this species as it is the best known and most commonly planted in the Northern States. It is one of our finest native Evergreens; of pyramidal habit, attaining seventy feet in height and sometimes more. The branches are delicate and somewhat pendulous. The dark green foliage is tufted, yet light in appearance. Makes a handsome specimen tree and is always desirable in the Evergreen group.

PINE—Pinus

Austrian Pine, Corsican Pine, Black Pine. (P. Laricio var. Austriaca.) Lg. A European Pine of much ornamental merit. It makes a tall, handsome tree with broad, oval head. One of the most important Conifers for specimen or mass planting, and exceptionally good for windy exposures.

Dwarf or Swiss Mountain Pine, Mugho Pine. (P. montana var. Mughus.) Sm. A low spreading Pine and very useful in lawn planting. In foliage it is a true Pine with stout, bright green needles of med-

ium length. Valuable for planting on rocky ground and hillsides.

Jack Pine. (*P. divaricata.*) Med. The most northern of all American Pines. While not of as great ornamental value as most of the other Pines, the species is coming into use in the prairie states on account of its extreme hardiness and vigor.

Northern Ponderosa Pine, Yellow Pine, Bull Pine. (*P. ponderosa* var. *scopulorum.*) Med. Forms a stout, spreading tree with branches often pendulous. A rapid grower, its branches heavy and rough coated with bark. Foliage is dark green, the needles growing out at right angles to the twig and extremely stiff and heavy.

Scotch Pine. (*P. sylvestris.*) Med. to Lg. This Pine is one of the most important timber trees of Europe. By many it is considered of equal ornamental merit with the White Pine and Norway Pine and is a very desirable tree for the evergreen group. A rather pyramidal tree when young, with broad and round top, often picturesque in old age. The needles are of medium length, very rigid and of a bluish green color.

White Pine. (*P. Strobus.*) Lg. Our native northern White Pine is famous as a stately and beautiful tree under a wide variety of conditions. It is tall and straight with slender, glaucous foliage, somewhat tufted at the ends of the branches. In habit it is very graceful whether kept low by trimming or allowed to grow naturally.

SPRUCE—*Picea*

Black Spruce. (*P. nigra.*) Med. It is of variable habit, sometimes attaining quite a height but mostly of medium size. The foliage is very much darker and shorter needles than White Spruce. Not an ornamental tree, but valued by some for its extreme hardiness.

Black Hill Spruce. One of the handsomest, hardiest and best types of the evergreen. Adapted for prairie planting. Seed secured from Black Hills in South Dakota. Very desirable.

Colorado Blue Spruce. Med. to Lg. This noble species from the Rocky Mountains is without doubt the most striking and ornamental of the Spruces, if not of all the Conifers. A dense growing, symmetrically pyramidal tree with stiff, pointed foliage, the needles being very thickly borne on the stem.

(var. *glauca*). This type of the Colorado Blue Spruce, sometimes known as Koster's Blue Spruce, has been selected and bred by nurserymen because of its extreme silvery blue foliage. It is the highest colored and most striking of all Evergreens for lawn planting and should be more used. The high price which these trees command is due to their rarity when grown from seed and the difficulty of grafting successfully.

COLORADO BLUE SPRUCE

purposes. It forms a loosely, symmetrical tree with rather pendant branches toward the base. As a specimen tree on good soil, it is a shapely feature for any planting. For shelter-belt or other hedge purposes it is also peculiarly well adapted because of its dense foliage and its ability to retain its lower branches. Its color is a bluish green. This species endures heat and drought better than most other Evergreens of true ornamental value.

Norway Spruce. Lg. (*P. excelsa*.) Of rather rapid growth and is a handsome tree with its graceful habit and dark green dense foliage. In Minnesota and adjoining states, the native White Spruce is hardier and therefore preferable.

White Spruce. (*P. alba*.) A well known native tree and one of the most magnificent ornamental evergreens for all

SPRUCE, DOUGLAS—*Pseudotsuga*

Douglas Spruce, Red Fir. (*P. Douglassi*.) Lg. The only species well known in cultivation, and in its habitat thru the mountains of western North

America it is one of the tallest and handsomest forest trees. It thrives best in a porous, sandy loam: of symmetrical and pyramidal habit, with regular branches and dark red brown bark. The needles are long and of a green or bluish green, varying with different specimens.

Forestry and Shelter-Belt Stock

The propagation of small stock for forestry planters, and also those living on prairies where shelter belts are necessary, has always been an important part of our business. We can supply the leading varieties of both deciduous trees and evergreens that have been tried and found best adapted for these purposes.

Ages and Sizes. For the most intelligent filling of orders for this class of stock we have found it expedient to grade all seedlings and stock grown from cuttings according to height. We can supply in various ages, from one to three years in deciduous stock, and from two to ten years in evergreens. Among the deciduous varieties grown from seed, such as Ash, Box Elder, Maple, etc., we grade in regular sizes, running 6 to 12 in., 12 to 18 in., 18 to 24 in. high, etc., and are prepared to furnish this stock in quantity. Among the evergreens we handle largely transplanted stock ranging in size from 8 to 12 in., up to 3 to 4 ft. We can also supply seedling stock 8 to 10 in. high in Arbor Vitæ, Balsam Fir, White Pine, Jack Pine and Black Spruce.

Space does not permit us here to enumerate the qualities of each separate variety as adapted to the shelter belt. We would refer interested parties to our special circular covering this important branch of tree planting. Much valuable information, regarding the selection of varieties, and also as to methods of planting and cultivation, will be found therein.

ORNAMENTAL DECIDUOUS SHRUBS

ALMOND—*Amygdalus*

The so-called Flowering Almonds really belong to the genus *Prunus*, as they are varieties of *P. Sinensis*. To avoid confusion, we have therefore listed them under that head.

BARBERRY—*Berberis*

Their orange and yellow flowers in May or June are succeeded by a small but highly colored fruit. In many places are much used for hedging purposes. For this use they give the best effect when grown as a loose hedge and not sheared too closely.

European Barberry, Common Barberry. (*B. vulgaris*.) 5 to 6 ft. An upright grower with thorny branches and pretty, light green foliage. The yellow flowers of early summer are followed by dark red berries.

Purple-Leaved Barberry. (var. *purpurea*). Similar to *B. vulgaris* in habit but the foliage is a deep rich purple. The color is distinct and met with in few other shrubs or trees.

Thunberg's Japanese Barberry. (var. *Thunbergii*.) 2 to 3 feet. Of low, spreading growth, forming a dense bush. The twiggy branches are set with small, sharp thorns and in spring are covered with small flowers succeeded by brilliant scarlet berries. The foliage takes a splendid autumn coloring of gold and scarlet.

BUCKTHORN—*Rhamnus*

Common Buckthorn. (*R. Catharticus*.) 4 to 6 ft. June-July. One of the best plants for ornamental hedges. The ovate, dark green leaves are attractive throught the season. Flowers small and inconspicuous. Branches are thorny. The black fruits are about the size of a pea. It stands shearing well and is easily kept trimmed to any desired height and form.

BUFFALO BERRY—*Shepherdia*

Shepherdia Argentea. The Western Buffalo Berry. 8 ft. A sturdy shrub native in the Dakotas and Manitoba. Stout, thick branches, with a profusion of spurs, and thickly covered with foliage, light green above and silvery beneath giving a similar effect as the Russian Olive. The inconspicuous flowers appear before the leaves and are followed on the pistillate plants by a mass of yellow fruit. A good vigorous shrub for hedges where close clipping is not required, and valuable for use on soils that are not the best.

CRANBERRY, HIGH BUSH

High Bush Cranberry. (*V. opulus*.) 7 to 10 ft. June. Has handsome broad foliage of a lustrous, dark green color, changing later to rich coppery tints. The large flat cymes of white flowers are very ornamental but the shrub is particularly conspicuous later in the fall and early winter for its brilliant scarlet fruit which hangs in large pendulous clusters and remains on until spring.

(var. *nanum*.) 2 ft. A dwarf, bushy shrub with good foliage and valuable in grouping. It has been used somewhat for low hedging where a border 18 inches high is desirable.

CORAL BERRY

Coral Berry, Indian Currant. (*Symphoricarpus vulgaris*.) 4 ft. July. Resembles *S. racemosus* in

growth but is little more compact. The flowers are borne in dense terminal spikes. They are followed in late summer by dark purplish red berries, smaller than the fruit of *S. racemosus* and hanging in closer clusters. Its persistent foliage makes it well adapted for shady places.

CURRENT—Ribes

Crimson-Flowered Currant. (*R. sanguineum*.) 3 ft. July. Deep red flowers produced in great abundance.

Gordon's Currant. (*R. Gordonianum*.) 4 ft. May-June. A profuse blooming variety with crimson and yellow flowers in showy spikes.

Missouri Currant, Golden Currant. (*R. aureum*.) 4 to 6 ft. A native species with golden yellow flowers in showy racemes. These have a spicy fragrance. The fruit is usually black but occasionally yellow.

Mountain Currant. (*R. alpina*.) 3 ft. May. Dense, upright racemes of golden flowers. Fruit deep scarlet.

DEUTZIA

We are indebted to Japan for these plants. Their luxuriant foliage and profusion of attractive flowers have given them a popular place among flowering shrubs.

Dwarf Deutzia, Japan Snowflower. (*D. gracilis*.) A species of dwarf habit. Flowers pure white. It is a low, dense grower and entirely covered with bloom in its season.

(*D. crenata*.) 4 to 6 ft. Showy white-tinged pink flowers.

DOGWOOD—Cornus

An important genus of ornamental shrubs, most of them hardy and most of them particularly conspicuous for their brilliantly colored bark. Those with conspicuous bark are especially desirable in massed groups in contrast with other shrubs. Some of the varieties are also finding favor as hedge shrubs for loose or open border.

American Red Ozier Dogwood, Kinnikinnick. (*C. stolonifera*.) 6 to 8 ft. This well known native of our northern forests is being more and more used in ornamental planting, especially in the northern states where its absolute hardiness is appreciated. The bark is a dark, rich red and contrasts beautifully with the darker tone of other trees and shrubs. Flowers in dense cymes followed by white berries.

Siberian Dogwood. (*C. alba*.) 5 to 6 ft. A strong grower with erect and stout, bright red branches. Useful for shrubbery and for winter effects.

Yellow-branched Dogwood. (var. *flaviramea*.) Bright yellow bark in winter; particularly effective in shrubberies planted with the red-branched Dogwood.

C. sanguinea. (var. *elegantissima variegata*.) 4 to 5 ft. One of the most desirable shrubs with variegated foliage. The leaves are broadly margined with white and some are almost entirely white. The bark is bright red in winter.

ELDER—*Sambucus*

Common American Elder. (*S. Canadensis*.) 8 to 12 ft. A large spreading bush with handsome foliage. The white flowers in June and July are borne in flat cymes. They are followed by black fruits in August and September.

Cut-Leaved Elder. (var. *laciniata*.) 5 to 9 ft. A valuable variety with elegantly divided leaves. Of drooping habit and one of the handsomest shrubs in cultivation.

European Elder, Blackberried Elder. (*S. nigra*.) 6 to 10 ft. July. A native of Europe, with purplish black berries in September.

Golden Elder. (var. *aurea*.) 5 to 8 ft. Bright, golden yellow leaves, the color being distinct and permanent all summer. Of vigorous spreading habit. One of the best golden foliaged shrubs.

Red-berried Elder. (*S. racemosus*.) 6 to 10 ft. May. Showy cymes of white flowers, followed by dense clusters of vivid crimson fruits.

EUONYMUS—Strawberry Tree, Spindle Tree, Burning Bush

Burning Bush, Waahoo. (*E. atropurpureus*.) 8 to 10 ft. This is a native species and for general use considered the best variety in this family.

Strawberry Bush. (*E. Americana*.) 5 to 8 ft. A slender grower of dense habit. Foliage light green. Flowers reddish green in June. Fruit crimson pink.

FORSYTHIA—Golden Bell

Fortune's Forsythia. (*F. Fortunei*.) 8 ft. April and May. An upright grower, with deep green foliage and pendulous, trumpet-shaped, bright yellow flowers.

(*F. viridissima*.) 6 ft. May. Leaves and bark dark green. Flowers deep yellow. Of open growth and a fine shrub for general use.

HAZELNUT—Corylus

Common American Hazelnut. (*C. Americana*.) 4 to 8 ft. This well known shrub, thriving luxuriantly in our native woods, is being used more and more for ornamental effects. Its rich foliage and erect compact habit of growth makes it particularly desirable for planting in massed groups where a solid color is desired.

HONEYSUCKLE—Lonicera

This is an extensive genus of upright and climbing shrubs. They are free bloomers and of easiest culture. Many of them make admirable hedge plants and are being more and more used for that purpose. The climbing varieties will be found described under Climbing and Trailing Shrubs.

Morrow's Bush Honeysuckle. (*L. Morrowii*.) 5 ft. July. A Japanese variety forming a broad spreading bush with yellow flowers followed by showy crimson fruits.

Red Tartarian Honeysuckle. (var. *grandiflora*.) Flowers deep pink, almost red and larger than white.

Tartarian Honeysuckle. (*L. Tartarica*.) This is the best known variety in the western states and with its sub-varieties it can be found in nearly all ornamental plantings. The newer variations, var. *splendens*, var. *grandiflora*, etc., are so much superior to the old type that they are rapidly superceding it. All form vigorous upright shrubs from 8 to 12 ft. in height and are valuable for their flower and fruit alike. *L. Tartarica* proper has pink flowers in May and June.

White Tartarian Honeysuckle. (var. *alba*.) The well known white flowering variety. Otherwise similar to above.

HYDRANGEA

H. paniculata. (var. *grandiflora*.) 6 to 8 ft. August and September. The showiest of all autumn flowering shrubs, bearing immense heads of creamy white flowers which, with the approach of cold weather, turn to rich shades of pink and coppery red. The large individual flowers are sterile and the panicles remain intact long after the first frosts.

JUNEBERRY—Amelanchier

Success Dwarf Juneberry, Shad Berry, Service Berry. (*A. Botryapium* var. *Success*.) 4 to 5 ft. April. It bears white flowers in late April, in most locations completely covering the shrub before the foliage or flowers of the neighboring trees have commenced their growth. The dark red berries which

are ripe in mid summer are very ornamental. They have a particularly agreeable flavor, much like the Huckleberry, and are of good quality for pies, sauces, etc.

LILAC—*Syringa*

As explained under the head of *Philadelphus*, this generic name should be used only in connection with the Lilac. In the past it has been used as a common name for some of the varieties of *Philadelphus* but there is no connection whatever between them as they belong to entirely different botanical orders. No other shrub as a class is perhaps so well known. A careful selection will offer a greatly extended season of blooming.

Common Purple Lilac. (*S. vulgaris*.) 8 to 10 ft. May. This is the oldest and best known type of the Lilac. From it have sprung most of the hybrids and seedling varieties which have made the Lilac as a class one of our most popular modern shrubs.

Common White Lilac. (var. *alba*.) The well known white flowering form of the above.

Siberian White Lilac. (*S. Siberica alba*.) A vigorous growing variety with small and narrow foliage. The flowers are white with a bluish tint and

SYRINGA—VILLOSA

quite fragrant. It is very free flowering and one of the best of the lilacs.

(*S. villosa*.) 6 ft. May. A species from Japan. Large branching panicles. Flowers light purple in bud and white when open. Fragrant. Foliage resembles that of the White Fringe; late bloomer.

Hungarian Lilac. (*S. Josikæa*.) 6 to 8 ft. May. From Transylvania. A fine distinct species of vigorous upright growth with dark, shining leaves

and violet purple flowers which appear very late, generally after the other Lilacs are thru blooming.

Japan Tree Lilac. (S. Japonica.) 15 to 18 ft. Late June. A distinct variety forming a pyramidal and upright shrub or small tree. It has broad, handsome, dark green foliage and bears large heads of creamy white flowers very late in the season.

Persian Lilac. (S. Persica). 5 to 6 ft. May and June. A distinct species of rather smaller growth than S. vulgaris. The branches are slender and straight with smaller and narrower leaves. The bright purple flowers are borne in loose panicles. A very graceful form.

The following six grafted Lilacs we grow as being the finest of the improved varieties, representing the purple, red and white shades in both single and double flowers.

var. Chas. X. Single. A strong growing variety with large shining leaves. Loose trusses of reddish purple flowers. One of the best.

var. Ludwig Spæth. Single. Panicles long. Individual flowers large, single, dark purplish red. A distinct and superb variety.

var. Madam Abel Chatenay. Double. Large panicles of double white flowers. A very fine variety.

var. Pres. Grevy. Double. A very fine, double variety with large panicles of beautiful blue flowers.

var. Princess Alexandra. Single. A variety of white flowers. Panicles medium to large. One of the finest of its color.

var. George Bellairs. Double. Red.

OLEASTER, WILD OLIVE—*Elæagnus*

Russian Olive or Russian Oleaster. (*E. augustifolia*.) 12 to 20 ft. Forms a large sized shrub or small tree with a rounded top and narrow leaves about three inches long, light green above and silvery white beneath. The small yellows blossoms appear in profusion the latter part of June. They have a pronounced and distinct fragrance that is very agreeable. It is extremely hardy and succeeds well in very dry locations. It is proving a good stock hedge and seems adapted to the purposes of ornamental hedges or screens.

Silver Berry. (*E. argentea*.) 5 to 8 ft. July. A native of Manitoba, Minnesota and Dakotas. Forms a handsome shrub with large leaves (comparatively), silvery on both sides. The flowers are small and yellow, quite fragrant. They are followed by silvery berries, resembling *E. augustifolia* but smaller.

PLUM AND ALMOND—Prunus

Black Cherry. (*P. serotino*.) See *Cerasus Sero-*
tino under Deciduous Trees.

FLOWERING PLUM

Double Flowering Plum. (*P. triloba*.) 4 to 6 ft. May. A broad spreading shrub of vigorous growth with three lobed leaves preceded by light pink, very double flowers which completely surround and cover the branches so as to entirely hide them. One of the finest, hardy, spring-blooming shrubs under

cultivation. As a single lawn plant it is very effective and also a good shrub to work in groups with other shrubs.

Double White Flowering Almond. (*P. Japonica flore alba pleno*.) 4 ft. May. Handsome, double white flowers in great profusion completely covering the branches.

Red Flowering Almond. (*P. Japonica flore rubro pleno*.) 3 to 4 ft. May. A charming, low growing shrub which in its season is covered with double pink or red flowers.

Western Choke Cherry. (*P. Virginiana* var. *demissa*.) 8 to 12 ft. This well known, native shrub is being used more each year in ornamental planting. Perfect hardiness in rather exposed conditions gives it a value in this line. In growth it forms a large compact shrub or small tree with good foliage and it is a distinctly ornamental species.

Western Sand Cherry, Rocky Mountain Cherry. (var. *Besseyi*.) Vigorous and absolutely hardy, has many ornamental purposes. The white blossoms appear in early May and are followed by black fruit three-quarters to one inch in diameter.

PRIVET—*Ligustrum*

Where it succeeds well, the Privet in all its varieties has become a very popular shrub. It lends itself to a number of ornamental purposes, the best known being its use in hedges and borders. The foliage of most sorts is sub-evergreen.

Chinese Privet. (*L. Iboia*.) 4 to 5 ft. A distinct variety with large white flowers produced in great profusion and very fragrant. Long intertwined branches.

Amoor River Privet. (var. *Amurense*.) 5 to 7 ft. This is of lighter, more slender growth than the above. Light green oval foliage and showy spikes of pure white flowers.

PURPLE FRINGE

Purple Fringe or Smoke Tree. (*R. cotinus*.) A vigorous, bushy grower with very ornamental foliage and bearing very large panicles of yellowish purple, feathery flowers in June. There is nothing else like it in shrub or plant. The foliage of this variety also assumes shades of reddish brown in fall.

True Purple Fringe. (var. *atropurpurea*.) A form with flowers of a deep reddish purple. Very distinct and showy.

SIBERIAN PEA TREE—*Caragana*

C. arborescens. 10 to 15 ft. June. By some this is cataloged under deciduous trees but in the North and West it belongs among tall growing shrubs. Its numerous yellow, tapering twigs and very small pinnate leaves are of the same character as those of the *Acacias*, but much smaller and of a rare golden green color. The flowers are small, yellow, and produced singly or in clusters. A fine shrub for low screens.

SPIREA—Meadow Sweet

Ash-Leaved Spirea. (*S. sorbifolia*.) 5 ft. July. A vigorous growing shrub with large handsome foliage resembling that of a Mountain Ash. The white flowers are borne in elegant long spikes. The foliage appears very early in the spring. A desirable shrub in every way.

Billard's Spirea. (*S. Billardi*.) 4 ft. July and August. A strong grower with dull green foliage and dense panicles of bright pink flowers. Also blooms occasionally during the fall.

Fortune's Spirea. (*S. callosa*). 3 to 4 ft. June. A compact shrub with upright branches and bluish green foliage. Bears panicles of rosy pink blossoms sometimes continuing all summer.

Fortune's Dwarf White Spirea. (var. *alba*.) 2 ft. Blooms all summer. A pure white form.

Golden Spirea or Golden-Leaved Nine Bark. (*opulifolia* var. *aurea*.) Foliage is of a bright golden color and finely shaded. This is one of the finest golden-leaved shrubs and a very desirable variety for the contrast it offers.

Lance-Leaved Spirea. (*S. Reevesii*.) 4 ft. June. A charming shrub with narrow pointed leaves and large round clusters of pure white flowers. The bloom covers the whole plant and makes it very effective.

Thunberg's Spirea. (*S. Thunbergii*.) 3 to 4 ft. May. One of finest spring blooming, small shrubs. Flowers are pure white and are borne along the entire length of the branches, bending them down in graceful curves. Foliage narrow and willow-like and turns to pleasing shades of orange scarlet in autumn.

Van Houtte's Spirea. (*S. Van Houttei*.) 4 to 5 ft. June. Perhaps the most popular of all the Spireas and has been the most planted. It is of upright tho pendulous growth with foliage of rich green which assumes pleasing autumnal coloring. When covered with its dense clusters of pure white flowers, the branches are weighted down nearly to the ground.

Willow-Leaved Spirea. (*S. salicifolia*.) 4 ft. July and August. Long narrow willow-like leaves. Flowers rose colored. A distinct and very desirable variety.

S. Douglassi. 3 ft. August. This variety bears immense terminal spikes of deep rose colored flowers. One of the best.

S. Bumalda. 2 to 3 ft. July and August. Dwarf, but vigorous of habit; foliage narrow. Flowers rose color in compact corymbs.

(var. *Anthony Waterer*). This beautiful variety has largely superceded its parent. It produces flowers of a bright crimson and blooms so freely that it may be kept in flower thruout the summer till late fall by trimming away the dead blooms. The dense flower clusters are almost twice as broad as those of the other varieties of this species and of a much brighter, richer color. The foliage also is very handsome being variegated with creamy white or yellow and sometimes tinted with pink.

S. arguta. 3 ft. May. Japan. Of light open habit, with small deep green foliage. When in bloom, each branch is completely covered with a wealth of minute, pure white flowers.

SIBERIAN HEDGEWOOD

The best low growing, hardy hedge yet discovered. It was introduced several years ago by Prof. N. E. Hansen, of S. D. We have tested it upon our grounds for several years and believe it will take its place as a standard hedge shrub in this section. It stands shearing without injury, and is very attractive. It is hardy clear to the tips and one of the most favorable features is that the buds start early. The hedge is green and handsome fully two weeks before other hedge shrubs are in leaf. Foliage hangs on late in the fall.

SNOWBALL

COMMON SNOWBALL OR GUELDER ROSE

Common Snowball or Guelder Rose.

(var. sterilis.) 6 to 8 ft. The old fashioned snowball and always popular. Its large, globular clusters of pure white flowers in May and June have made it a conspicuous shrub in the gardens for many generations.

Japanese Snowball.

(V. plicatum.) 4 ft. May.

Handsome olive foliage and the flowers are larger and of a purer white than the common snowball. They are also borne in denser heads and show beautifully against the foliage.

SNOWBERRY

Snowberry. (*Symphoricarpus racemosus*) 4 ft. July and August. A slender branched upright growing shrub with rose colored flowers in loose racemes. These are followed by showy pure white berries which remain on well into the winter and which constitute the most conspicuous and valuable features of the variety. An excellent sort for planting in densely shaded places.

SUMACH—Rhus

Smooth Sumach. (*R. glabra.*) 8 ft. June. Handsome, pinnate foliage, assuming splendid autumn coloring. Showy spikes of crimson fruits.

Cut-Leaved Sumach. (var. *laciniata.*) A variety of the above with deeply-cut, fern-like foliage. An elegant plant wherever used. Very few shrubs of its size; characteristically beautiful cut foliage.

Staghorn Sumach. (*R. typhina.*) 8 to 12 ft. A showy, broad headed shrub with very large, long, compound foliage, light green in color, changing to showy autumnal shades of red and yellow. The new growth of the smaller branches is clothed with a peculiar down, giving an appearance similiar to that of the growing horn of a deer.

SYRINGA OR MOCK ORANGE

Philadelphus

Golden Mock Orange. (var. *aureus.*) 3 to 5 ft. A compact shrub with bright yellow foliage which retains its color well thruout the season. Very effective in grouping with the darker foliage of others.

(var. *speciosissimus.*) Of graceful habit with branches bending slightly at the tips. In June the bush is densely covered with large, pure white, slightly fragrant flowers.

Gordon's Mock Orange. (*P. Gordonianus.*) 8 to 12 ft. July. One of the strongest growers, with very large, pure white flowers, very slightly fragrant. Particularly valuable on account of its late blossoming season and the good size of its flower.

Large-Flowered Mock Orange. (*P. grandiflorus.*) 8 to 12 ft. June. Very showy, large flowers, usually in threes. Scentless. Rapid growth with reddish bark.

Sweet Mock Orange. (*P. coronarius.*) 8 to 12 ft. June. The old and well known Mock Orange. A graceful, upright bush with long branches covered with dark green foliage. In June completely covered with showy pure white flowers of a delightful fragrance.

VIBURNUM

Arrow Wood. (*V. dentatum*.) 6 ft. June. Showy, glossy green foliage. White flowers in flat cymes, followed by deep, steel blue berries in September.

WEIGELA

They are very ornamental and popular where they are successful. They flower after the Lilacs. The following two varieties are the most beautiful and satisfactory.

Rose-Flowered Weigela. (*W. rosea*.) 5 ft. May and June. An elegant shrub with fine rose colored flowers. It is erect in habit and with good foliage. The best known and perhaps the most popular.

(*W. hybrida* var. *Eva Rathke*.) The flowers of this hybrid are a dark carmine red.

WITCH HAZEL—Hamamelis

(*H. Virginica*.) 8 ft. October and November. A native, free growing shrub with well known medicinal properties. It has ovate, slightly downy leaves, like the Hazel, turning to brilliant yellow and purple shades in autumn. The yellow flowers are remarkable for their appearance in late autumn just as the leaves are turning and about to fall.

Small Stock for Ornamental Hedging

For the benefit of purchasers who desire shrub stock for ornamental hedges but who do not wish to invest the amount of money required for the larger stock to give immediate effect, we have a special line of graded seedlings in the following varieties: Berberry Common, Berberry Purple, Buckthorn, Buffalo Berry, Caragana, Russian Olive and Siberian Hedgewood. We can supply these varieties in three sizes: 6 to 12 in., 12 to 18 in., and 18 to 24 in. high. This stock will give the purchaser splendid results, altho requiring a little longer time to make a good hedge than the heavier stock.

Climbing and Trailing Shrubs or Hardy Vines

We list below the best and hardiest varieties in this class, such as by experience have been found most satisfactory in the northern states.

Approximate blossoming season is represented by the months given in the description of those varieties, prominent for their flowers.

ARISTOLOCHIA SIPHO

Dutchman's Pipe

Leaves are frequently a foot in diameter and heart shaped, vine hardy. Should be planted on shady side of house. Climbs on trellises. Very effective on account of its foliage. Slight bloom.

BITTERSWEET—*Celastrus*

Climbing Bittersweet, False Bittersweet. (*C. scandens*.) A rapid growing, climbing shrub, with ornamental, light green foliage. The yellow flowers in June are followed by bright yellow and crimson fruits in the autumn. A very desirable plant for covering trees, rocks, rough walls, and trellis work.

CLEMATIS—*Virgin's Bower*

C. cærulea. The flowers of this type are rather narrow, of delicate lilac, with purple stamens.

C. Crispa. A slender climber, attaining only a height of 2 to 3 ft. Leaves are very thin. The flowers are purple, varying to whitish, bell-shaped, one to two inches long.

Henryi. A robust plant and a free bloomer. Flowers creamy white. Large flowered variety.

Jackmani. Flowers are large, intense violet purple. Remarkable for its velvety richness. It is a free grower and an abundant bloomer. The sepals have a ribbed bar down the center; broad central tuft of pale green stamens.

Madam Edward Andre. Flowers a beautiful, bright, velvety red.

C. paniculata. July and September. It is a very rapid climber, and desirable wherever a strong and rapid growing vine is needed, on walls, verandas, fences, etc. In late summer it produces dense sheets of medium sizes, pure white flowers, star shaped.

C. Viorna var. coccinea. Beautiful flowers and much used. Has been crossed with other hardier Clematises and desirable varieties have resulted.

C. Vitacella. This is one of the oldest and best types of the Clematis that have been introduced into this country. It forms one of the leading groups of the garden Clematises, and is one of the parents of the Jackmani type of hybrids. It bears a profusion of medium sized flowers of a bright, wine-red color. June and August.

C. Virginiana. (*Virgin's Bower*, *American White Clematis*.) August. Always a popular, hardy, climbing vine. It is a native of the Northwest and succeeds everywhere. Grows to a height of 20 ft., and sometimes more. In August produces an immense profusion of white, feathery flowers.

CHINESE MATRIMONY VINE—*Lycium*

L. Chinense. May. This is a medium sized creeper or trailor, attaining a maximum height of 12 ft. The foliage is of a grayish green. The flowers which appear from June to September vary thru shades of pink to purple. The fruit which follows is of a deep crimson and very showy. It is borne abundantly along the entire length of the branches. The foliage remains fresh until severe frosts.

HOP VINE

Valued for its foliage and blossoms. Grown commercially in some sections of the country for its blossoms which are used for malting and other purposes.

HONEYSUCKLE—*Lonicera*

Hall's Evergreen Honeysuckle. (var. *Halleana*.) One of the best and a free bloomer. Has oval, semi evergreen foliage and fragrant yellow and cream colored flowers in constant succession. Excellent for covering trellises, rocks, dry banks, etc.

Trumpet Honeysuckle. (*L. sempervirens*.) One of the best climbers of the class. It is a vigorous grower, with glabrous foliage. Flowers trumpet shaped, 1½ to 2 inches in length; in color they are scarlet or orange scarlet.

(var. *flava*.) A type with yellow flowers. Should not be confused with *L. flava*.

SOLANUM—Nightshade

German Bittersweet. (*S. dulcamara*.) It is a rapid grower, of clinging habit, and with beautiful, dark green foliage. During the summer it is covered with violet-purple blossoms and bright green fruits which turn to a brilliant scarlet. The vine is thus covered with the flowers, the green fruit and the scarlet, thruout the summer.

WOODBINE—*Ampelopsis*

Virginia Creeper or Common Woodbine. (*A. quinquefolia*.) Flowers inconspicuous. The splendid Ivy found in our Northern woods which is well known for the beautiful autumnal coloring it furnishes.

Engelman's Woodbine. (var. *Engelmanii*.) A type of *quinquefolia* which has long been desired. It has shorter joints and very much smaller and thicker foliage. It also is better equipped with tendrils by which it will climb walls of stone or brick as closely as the *tricuspidata* or *Veitchii*. This variety has proved itself perfectly hardy in Minnesota.

Hardy Herbaceous Perennial Plants

List of Selected Varieties Suitable for Lawn Planting in the Northwestern States

No ornamental lawn planting, what ever its extent, can be complete without a liberal proportion of these hardy flowering plants. The ease with which they are maintained is an important factor, but their great and varied scope of usefulness gives them still greater importance. Not only do they enter into every important feature of the landscape, but by a judicious selection they at the same time yield a profusion of bloom for indoor decoration thru six months of the year. In height they range from six to eight or more feet thus offering proper gradation for mass groups and wide selection for specific purposes.

ACHILLEA—Milfoil or Yarrow

Of easiest culture and very valuable for borders and rock work, or in situations refused by more tender plants. Make good carpets in dry, sunny situations.

Rosy Milfoil. (*A. millefolium* var. *roseum*.) 12 in. June-August. Very finely cut, deep green foliage. Flowers bright pink in dense heads; good for cutting.

A. Ptarmica var. **The Pearl.** Stiff upright stems. Admirable for cutting. One of the very hardiest and best border plants for exposed locations.

ARTEMESIA—Wormwood

Silky Wormwood. (*A. frigida*.) 1 ft. September. One of the most beautiful of the genus, with very finely-cut foliage. Will thrive in poorest of soil.

ASTER—Starwort—Michælmass Daisy

New England Aster. (*A. Novæ Angliæ*.) 4 to 5 ft. September-October. Large heads of clear, deep purple flowers with bright yellow centers. One of the most conspicuous.

A. Novæ-Belgica var. **Lady Trevellyn.** 3 ft. September-October. A form giving large heads of pure white flowers with yellow centers. The panicles are often 15 to 18 inches long.

A. Robert Parker. 4 ft. September-October. Lavender. The flowers are produced in large sprays, and it is one of the most satisfactory.

ALUM-ROOT—Heuchera

They have good foliage and form compact, ornamental clumps. Prefer a sunny location but will grow in the shade.

H. sanguinea. 18 in. June-September. Flowers produced on long, graceful spikes in the greatest profusion. In color it varies from light red to crimson, giving a dazzling effect when in full bloom.

BELLFLOWER OR HAIRBELL

Campanula

Bearded Hairbell. (*C. barbata*). 1 ft. June-July Long, tubular, light blue flowers in clusters.

Carpathian Hairbell. (*C. Carpathica*.) 9 in. June-September. Of dwarf, compact habit. Flowers deep blue, on good stems for cutting and borne in continuous succession.

(var. *alba*.) Pure white flowers. Very effective.

C. grandiflora. (See under head of *Platycodon*.)

Canterbury Bell. (*C. media*.) An ornamental garden flower of easy culture. The flowers vary in color between blue, red, purple and white.

BLEEDING HEART, DIELYTRA

Dicentra

Bleeding Heart or Seal Flower. (*D. spectabilis*.) 3 ft. June. Long racemes of showy, heart-shaped, red and white flowers. By far the handsomest of its tribe, and will grow both in shady or sunny locations, but blooms more freely when given plenty of sun.

BOLTONIA

False Chamomile

A class much resembling the Asters, yet giving a far different effect. Of easy culture and a fine addition to the autumn list.

B. asteroides. 3 ft. September. Pure white flowers.

B. latisquama. 4 ft. September-October. The flowers are pink, slightly tinged with lavender. Produced in immense heads bearing hundreds of blossoms.

B. LATISQUAMA

BUTTERCUP—*Ranunculus*

Bachelor's Button. (*R. acris* var. *flore plena*.) 2 ft. May-June. Showy, very double, deep glossy, golden yellow flowers and handsomely cut foliage.

CHINESE BELLFLOWER—*Platycodon*

P. grandiflora. 2 ft. July-September. A veritable giant Hairbell, forming a dense, branched bush of upright habit with attractive foliage and from July until September bearing a constant succession of conspicuous, bell-shaped flowers varying in color from pure white to deepest blue. Has also been called "balloon flower" owing to the peculiar formation of the bud.

CLEMATIS—*Virgin's Bower*

An extensive genus of handsome climbing shrubs or woody herbaceous plants, many of which are low growers and valuable in the hardy rockery and garden. The strictly climbing varieties will be found under the head of Climbing and Trailing Shrubs.

Scarlet Clematis. (*C. coccinea*.) 4 ft. June-September. Deep crimson, bell-shaped flowers with yellow throats.

Leather Flower. (*C. crispa*.) 6 ft. June-August. Showy, deep lavender, bell-shape flowers with pure white throats.

(*C. erecta*.) 4 ft. June-July. Dense, bushy habit. Handsome pure white flowers in large, showy clusters.

(*C. vitacella*.) 8 ft. July-August. A splendid variety with a profusion of bloom. Flowers are of a pleasing reddish-purple and the foliage gives a fine effect. Makes a rapid growth.

COREOPSIS—*Tick Seed*

C. grandiflora. 3 ft. June-October. America. Large, deep yellow, cup shaped flowers, each on a long clean stem, making it especially valuable for cutting purposes. A continuous bloomer during its season.

COLUMBINE—*Aquilegia*

Golden Spurred Columbine. (*A. Chrysantha*.) 3 ft. July-August. Bright golden flowers with long, thread-like spurs. An elegant border plant.

Rocky Mt. Columbine. (*A. cærulea*.) 1 ft. July-August. Very large flowers, often four inches across

with deep blue sepals and pure white petals and four long recurved spurs. A fine species for the border or base of rockery in well drained loam.

DAY LILY—*Hemerocallis*

These are excellent plants with grass-like foliage and dark orange colored flowers borne in panicles on long stems. They are exceptionally hardy, thriving in any good soil and are especially adapted to moist and shady places.

Yellow Day Lily. (*H. flava*.) 2 ft. June-July. Bright yellow flowers. Very fragrant.

DAY LILY—HEMEROCALLIS

Tawny Day Lily. (*H. fulva*.) 2½ ft. July-August. Flowers deep tawny yellow.

Double Orange Lily. (var. *Kwanso*.) 2½ ft. July-August. Flowers orange yellow, shaded copper.

FEVERFEW—*Pyrethrum*

P. roseum. 12 to 18 in. June-September. These showy plants produce flowers in a large variety of shades, the hybridizing having resulted in colors ranging from white, white with yellow center, yellow and lilac to rose, carmine and crimson. They are extremely desirable for cut flowers, easy to grow, and if cut down after flowering in June, they will bloom freely again in September.

Great Ox-Eye or Giant Daisy. (*P. uliginosum*.) 4 to 5 ft. August-October. Borne in dense bushes four or five feet in height, terminated by loose clusters of pure white flowers with bright yellow centers. The individual flowers are often four or five inches across, and each is borne on a good, stiff stem for cutting.

FORGET-ME-NOT—Myosotis

This well known genus of plants scarcely needs description. They thrive in moist, half shady places and will also grow to good advantage in the border.

FOX-GLOVE—Digitalis

A small and showy genus of perennial plants of easy culture. They prefer a rich, loamy soil and partial shade. Certain species are used in medicine.

Common Fox-Glove, Fairy Fingers or Witch's Fingers. (*D. purpurea*.) 4 to 5 ft. July. This variety is not grown in separate colors, but generally produces flowers which range in color from white, creamy white, rose and pink to purplish-red.

GAILLARDIA

GAILLARDIA—Blanket Flower

G. aristata var. *grandiflora*. 1 ft. June-September. The flowers are often three inches in di-

ameter and borne on good stout stems for cutting. The markings of the individual flowers differ widely, being in all shades of deep orange-yellow marked with a well defined, broad band of deep maroon and with a dark maroon center.

GERANIUM—Crane's Bill

G. prætense. 1 ft. July-August. Crow foot leaves. Flowers lilac purple.

G. sanguineum. 18 in. June-September. Perhaps the handsomest of its class. Compact in habit, with beautiful cut foliage and crimson-purple flowers throughout its season. An excellent plant for border.

GOLDEN GLOW, CONE FLOWER

Rudbeckia

Giant Purple Cone Flower. (*R. purpurea*.) 4 ft. June-October. An entirely distinct variety of medium growth. Bears very large, reddish purple flowers on good stems.

Golden Glow. (*R. laciniata*.) 6 ft. July-September. Very large, double, dahlia-like flowers of a brilliant, golden yellow color. These are borne in great masses surmounting the bush and making it an extremely showy plant.

HELENIUM—Sneezewort, Sneeze Weed

Common Sneezewort.

(*H. autumnale*.) 5 to 6 ft. September-October. Broad heads of deep golden-yellow flowers. One of the choicest of the hardy, tall growing plant.

HIBISCUS

Mallow

H. militaris.

5 ft. August. A very tall species with flesh-pink flowers, tinged with deeper color toward center.

HIBISCUS—CRIMSON-EYE

var. **Crimson Eye.** One of the showiest of herbaceous plants and one of the finest for massing. Flowers white with crimson center. Single. Very large and striking, often measuring five inches in diameter.

HOLLYHOCK—Althea

Indispensable plants in the garden or border, possessing a character peculiar to themselves which renders them especially valuable to break up any set effect in lawn planting. Can furnish the most desirable colors in both single and double forms.

IRIS—Rainrow Flower, Fleur de Luce, Fleur de Lis

The flowers are borne on long stems which bring them well up above their own foliage and that of other plants when grown in borders and beds.

The tuberous Irises are divided into several classes as follows:

IRIS—Japan

Apple Blossom. White, spotted with pink.

Commodore Perry. Large; blue. Petals yellow at base.

ROBT. CRAIG

with purple on center petals.

Victor. Blue-white, veined with violet.

IRIS—German

Augustina. Deep yellow and maroon.

Emperor. Large hand-some purple.

Gold Bound. Pure white; base of petals golden yellow.

Mahogany. Dark red, shaded maroon.

Mt. Hood. Deep blue; of good form.

Pyramid. Violet purple, veined white.

Robt. Craig. French gray, tinted

Fulda. Satiny white; lower petals lilac, feathered yellow.

Florentina alba. Sweet scented. Early flowering, white.

Gazella. White, heavily frilled with rich mauve.

Humboldt. Nearly white.

Lord Salisbury. Standards amber and white; falls dark purple with white veinings.

Madam Chereau. White, elegantly fringed with azure blue.

Mrs. Newbronner. Very deep golden yellow, and one of the best yellows.

Pallida. Light indigo blue. Very large.

Parisiensis. Large, showy; deep purple.

Pearl. Large white; very handsome.

Stenophylla. Blue and white.

Silver King. Flowers silvery white. Distinct and fine.

Velvetine. Standards, pale amber color, falls creamy white, veined with mauve.

LARKSPUR—Delphinium

Well known and valuable perennial plants with ornamental foliage. They are all free-flowering and of easy culture. The tall growing sorts are admirable for the back portion of the border and for grouping among shrubs. By preventing the flowers from going to seed, the plants will bloom continually until hard frosts.

D. Chinensis. 3 ft. July-October. Very large open panicles of handsome flowers, varying from deepest blue thru all lighter shades to pure white and deep lavender.

var. alba. A pure white form of the above.

D. Formosum. 4 ft. June September. Large, deep blue flowers with pure white eyes, and in showy, long spikes. One of the choicest.

LAVENDER—Lavandula

Common Lavender. (L. vera.) 18 in. June-August. This is the variety grown so largely in England and France for its essential oil which is used in perfumes and toilet water. It has deep blue flowers of a most penetrating and pleasing odor. A good plant for the border.

LILY—Lilium

Tiger Lily. (L. tigrinum.) 3 to 4 ft. July-August. Bright red, marked with large purplish spots. A well known old garden plant which is always popular for certain effects.

LILY OF THE VALLEY—Convallaria

C. majalis. 6 in. May-June. The Lily of the Valley is too well known to need description. Its spikes of pure white flowers and charming fragrance have made it a favorite for many centuries.

LOBELIA—Cardinal Flower

L. Cardinalis. 2 ft. September. America. The flowers of this variety are of an intense bright scarlet and are one of the showiest of all our native flowers.

LYSIMACHIA—Loose-Strife, Moneywort

Moneywort. (*L. nummularia.*) 4 in. June-August. Flowers deep yellow. A low creeping plant, excellent for planting under trees.

PLANTAIN LILY—Funkia

F. cærulea. 1 ft. June-July. Flowers, light blue; glossy foliage. Flowers borne on tall showy spikes.

PLANTAIN LILY

Corfu Lily. (*F. grandiflora*) 18 in. August-October. Heart-shaped, light green foliage and clusters of fragrant, pure white flowers in constant succession.

PEONY Peonia

Peonies succeed admirably in any loamy soil and may be made to thrive in the shady parts of the lawn where other flowering plants refuse to bloom. For bordering walks and driveways and for the

flower garden, an assortment of Peonies is quite indispensable. Our list includes some of the choicest varieties that have been tested on our grounds. By making proper selection, the blooming period may be extended in many locations from the middle of May to the end of June. They offer a range of color from pure white to deep purple, and many of them are fragrant,

PEONIA CHINENSIS—Chinese Peony

Double Varieties

Note: The nomenclature of the Peony is in a more or less chaotic state owing to the vast number of seedlings and hybrids brought out in the past few years. Our list comprises the cream of the hundreds of varieties we have tested in our trial gardens. The very finest colors and largest blooms are among them. A longer list would only make a selection confusing to the buyer.

Alba Sulphurea. Outside row of single petals have crimped edges, nearly white. Center pompon of yellow and red stamens. Medium grower; poor bloomer.

Artemise. A fine rose pink. Double row of outside petals; center pompon of same color; center slightly raised. Strong grower; free bloomer. A very solid color.

Canarie. White, yellow center.

Delachii. Purplish crimson, shaded violet.

Dorchester. Late free bloomer. Delicate salmon flesh color; excellent for all purposes.

Delicatissima. A shade darker than Artemise. Outside petals blend in with the pompon. Strong grower; free bloomer. Another fine pink.

Duc de Wellington. Single row of outside petals flesh color. Center, narrow petals straw color. Outside ones of these being same as outer petals. Fades to pure white. Strong grower; profuse bloomer, every shoot bearing a flower. One of the best white.

Felix Crousse. Brilliant red.

Festiva Maxima. Large, very double; pure white. Center petals fringed with red. Long stems. Strong grower; medium bloomer.

Fulgida. Crimson.

Grandiflora alba. Similiar in appearance to Duc de Wellington, but not so large nor so free in bloom.

DUC DE WELLINGTON

Grandiflora Rubra. Large, blood red.

J. Discalsne. Very similar to Jean d'Arc, except for the center section which is not raised so high. General appearance same. Strong grower. Long stems. Blooming quality same as Jean d'Arc.

Jerome. Pink.

Jean d'Arc. Flower in three sections. Single row of outside petals flesh pink, slightly darker than Madam Courant. Next, very double section of fringed narrow straw colored petals. Inside of this a raised center of almost white petals, these being large, with crimped edges. A distinct flower. General appearance classes it as a very light pink but fades to white when fully open in the sun. Medium strong grower; free bloomer.

L'Esperance. Sweet-scented rose.

Modeste. Deep rose, bright, showy, fragrant.

Madam Courant. Center very double, creamy white; center petals red. A single row of large flesh pink petals on outside of flower. General appearance pure white. Long stem. Strong grower; free bloomer.

Madam Chatenay. Large, double pink with cream center. Very handsome and desirable.

Prince de Talindyke. Dark red; very double. Double row of outside petals. Large cluster of bright yellow stamens. These are not conspicuous however. Strong grower, free bloomer.

Purpurea Superba. Almost identical with Prince de Talindyke. Both are beautiful rich, dark red Peonies.

Queen Victoria. Outside blush, white flesh center.

Rubra. Common red Peony.

Rubra Superba. Rich purplish crimson.

Rubra Triumphans. Rich purplish crimson.

Single White. White.

Triumph du Nord. Solid color of rose pink; in bud looks quite dark but opens up lighter. A double outside row of single petals, pompon petals wide, somewhat crimped at end. When open, edges of petals are white shading down to rose pink toward the center. Finely scented. Vigorous grower. Free bloomer.

Victor Verdier. One of the most elegant of the Peony tribe. Very large, double red, compact head; fragrant, vigorous grower, free bloomer and desirable in every way.

PÆONIA MOUTAN

Tree or Shrubby Peony

This type of Peony has not been very widely planted in the U. S. because of its slow propagation and consequently the high price at which it sells. It is a most desirable addition to the list of hardy flowering shrubs, however, and is being largely planted where color and bloom are desired. In the latitude of Minnesota, the "TREE" Peony is a misnomer as the plants do not attain sufficient height to make them more than a low shrub. The woody part attains a height of about 2 to 3 ft., and as the plant spreads from the root, it produces in a few years solid massive clumps which, when in full leaf, make a beautiful rough head of foliage that is intensely ornamental even without the flowers.

The advantages of the Tree Peony are that it blossoms about three weeks before the herbaceous Peonies, hence prolongs the season. Our plants are grown in our own nursery and give the best shades of pink, red and white. One or two clumps of these Peonies on the lawn will be sure to please the planter and repay the slight care required in covering the tops for winter. All that is necessary for this is to cover with a mulch of clean straw, corn stalk or other similar material to keep the flowering buds from alternate freezing and thawing, and thereby killing out.

PLATYCODON

See Chinese Bellflower, Page 68.

POPPY—Papaver

Iceland Poppy. (*P. nudicaule*.) 1 ft. June-October. Colors from pure white and yellow to deepest orange scarlet. The flowers are borne on slender stalks well above the foliage and they are fine for cutting purposes.

Oriental Poppy. (*P. orientale*.) 2 ft. June. Has large thistle-like leaves about a foot long, clothed with white bristly hairs. Its deep orange scarlet flowers have a dark purple spot at the base of each petal. They are of exceptional size, frequently measuring six inches across.

PHLOX—Hardy Perennial Varieties

Ground or Moss Pink. (*P. subulata*.) 4 in. May. Rose colored flowers. As a cover plant and for rockery work, we know of nothing that excels this. The foliage, handsome and moss-like, makes a close carpet of green and when in flower the plants form a sheet of color.

HYBRID PHLOX

P. paniculata and P. maculata. These hybrid varieties range in height from two to four feet. With these varieties the flowers are borne in large, showy heads and in nearly every case on good stiff stems for cutting.

Aglæ Adanson. Immense flowers snow white with red eye.

Albion. White with pink eye.

Augusta Revere. Bright Salmon.

Bacchante. Pink.

Beranger. Large, white with pink center.

Bridesmaid. Pure white, with crimson eye.

Champignot. Bright rose color.

SHASTA DAISY—CHRYSANTHEMUM

Champs Elysee. Purplish crimson.

Coquelizot. Orange scarlet, carmine eye.

Eclaireur. Carmine, salmon center.

Esias Tegner. Deep rose.

Eugene Danzenvillier. Lavender Lilac, with white edge and center.

E. G. Von Lassburg. Purest white in cultivation. Flowers larger than any other white.

Gen. Von. Hentz. Scarlet, with rose shadings and crimson red eye.

La Feu de Monde. Bright salmon red; late.

Lanibore. Bright rose.

Madam Muret. Flame color, carmine center.

Madam Pape Carpentier. Pure white; early, dwarf.

Matador. Bright orange, scarlet, cherry red eye.

Michael Buchner. Dark purple.

Miss Lingard. Pure white; lavender eye. Early.

Moliere. Salmon rose, with deeper eye.

Mrs. Jenkins. Pure white; very fine.

Pantheon. Deep salmon rose.

Professor Schlieman. Bright lilac rose; carmine eye.

R. B. Struthers. Bright pink salmon.

Richard Wallace. Pure white, violet rose center.

Skeleton. White, with red eye.

SWEET WILLIAM

Siebold. An improved scarlet variety.

Stanislaus. Bluish in color.

Von Hochberg. Ideal crimson Phlox. Richest of its color.

William Robinson. Pale salmon; rose center.

RIBBON GRASS—*Arundinaria*

Variegated Ribbon Grass. (*A. folius variegata*.) This is a strong and vigorous grower, the foliage attaining a height of 18 inches or more. The leaves are striped longitudinally with green and cream color. Very valuable for all border purposes.

SHASTA DAISY—*Chrysanthemum*

Shasta Daisy. (*C. Leucanthemum hybridum*.) Originated by Mr. Luther Burbank of California. The flowers are very large; color white with golden center. They are bold in effect and profusely borne on good stems for cutting.

SWEET WILLIAM, HARDY PINK

Dianthus

Sweet William. (*D. barbatus*.) 18 in. June-July. Germany. An old flower garden favorite. It sports into endless varieties of color—white, pink, purple, crimson and scarlet, and many sorts variously edged, eyed or spotted.

Scotch Pink. (*D. plumarius*). 9 in. June-July. This is strictly what is known as the hardy Grass Pink or Garden Pink. There are now many cultivated varieties of superior quality, nearly all with a decided carnation fragrance. The foliage is grass-like, very thick and makes a good border. The flowers are borne on good, clean stems. We carry the best varieties.

YUCCA

**Y U C C A —
Adam's Needle
or Spanish Bay-
onet—Bear
Grass**

Y. filamentosa. 3 to 4 ft. June-July. The best known species of Yucca and best adapted to the Northwest. Has stiff, broad, sword like foliage and surmounted by tall handsome spikes of large, fragrant creamy white flowers. Valuable in producing sub-tropical effect and a group of them upon the lawn commands instant attention when the monstrous heads of flowers are open.

Field or Out Door Roses

We have long made a specialty of growing rose plants and carry a most complete stock of our own growing, the largest of any nursery in the North.

ANNE DE DIESBACH

The plants we offer are all two year old field grown. The following list comprises only a small number of those we propagate. We have restricted this list to the very best and most vigorous varieties that are especially suited to the extreme North.

For convenience, the varieties are alphabetically arranged irrespective of the class to which they belong. Each variety is keyed as follows: C. Climbing; H. P. Hybrid Perpetual; J. June; M. Moss; H. R. Hybrid Rugosa.

The Hybrids Perpetuals are the best varieties where a wealth of bloom in the rose garden is desired. For hedge work or lawn grouping, the Rugosas and June roses are best adapted. The Moss and Brier roses are desirable for a number of purposes. All varieties marked "C" are the best sorts for porches, trellises and places where a climbing rose is needed.

Rose fanciers who wish a longer list we could refer to our special rose circular.

Alfred Colome. Rich Crimson, large, fragrant, very desirable.

Anne de Diesbach. H. P. In color the most lovely shade of carmine; very large double flowers, fragrant and one of the hardiest. A very desirable garden rose.

Baby Rambler. C. A wonderful little novelty, with large trusses of bright crimson flowers similar to those of Crimson Rambler. But instead of climbing, the plants form compact bushes not over eighteen inches high. Strictly a bedding rose, and most desirable in pots.

Baltimore Belle. C. Pale blush, nearly white; very double. Flowers in large clusters, the whole plant appearing a perfect mass of bloom.

Baron de Bonstetten. H. P. Dark Red.

Baron Prevost. H. P. Pure rose color; very large and full, flat form; a free bloomer, fragrant; very hardy.

Black Prince. H. P. Much sought after because of its dark crimson flowers, which are shaded so deeply as to be almost black; cupped large, full, fine shaped.

Blanch Moreau. M. Flowers are produced in clusters, large, full and sweet; pure white.

Capt. Hayward. H. P. One of the finest of the red; large blossoms; free bloomer; deliciously fragrant.

FRANCOIS LEVET

Clio. H. P. Flowers large, of globular form; flesh color, shaded in center with rosy pink; handsome foliage. One of the best roses.

Conrad F. Meyer. H. R. Large, elegantly formed buds and flowers, $3\frac{1}{2}$ to 4 inches across and perfectly double; color, silvery pink. Very fragrant. Entirely hardy and desirable in every way.

Comtesse de Murinais. M. One of the best pure white Moss Roses; flowers large, full and fragrant; good bloomer.

Countess de Roseberry. H. P. Pink.

Dorothy Perkins. C. A new hardy climbing rose, which, in its strong and vigorous growth closely resembles the Crimson Rambler. The flowers are formed in clusters of thirty to forty, and are of a beautiful shell pink.

Exelsa. H. P. rose. Dark red, very fine.

Fisher Holmes. H. P. May be briefly described as an improved General Jacqueminot. Flowers are fuller and more freely produced. A very valuable sort.

Francois Levet. H. P. An unusually strong and vigorous grower, and very free bloomer. Large, round stately flowers; color, bright rosy carmine. Very fragrant and exceedingly beautiful.

GENERAL JACQUEMINOT

Frau Karl Druschki. H. P. A pure paper-white, free flowering, large sized Hybrid Perpetual. The bloom is perfect in form and flowers measure four to five inches across; very double and fragrant; large thick petals, very durable and handsome.

General Jacqueminot. H. P. A strong, vigorous grower, entirely hardy; a nearly

and abundant bloomer. Both buds and flowers are considered models of perfection, and its brilliant shining crimson is the standard of color by which other roses are judged.

Gem of Prairie. C. Rose-red occasionally blotched with white; large flat flowers slightly fragrant.

General Washington. H. P. Red shaded with crimson, large, very full, flat form; a good garden rose. A very profuse bloomer, and when in perfection a very fine sort.

Glory de Margottin. H. P. Red.

Grus en Tepletz. H. P. Double red. Very free bloomer. Bears more red roses than any other variety known.

Hansa. H. R. Deep pink very double. Absolutely hardy and requires no winter protection.

Harrison's Yellow. J. Clear golden yellow; medium size; semi-double. Fine for planting in groups or with other shrubs.

John Hopper. H. P. Bright rose with carmine center; large and full, semi-globular; light green thorns; stout, bushy growth. A free blooming, standard sort.

Jubilee. H. P. Dark Red. Very fine.

Hugh Dickson. H. P. Vigorous grower; fine foliage; profuse bloomer; color bright crimson, shaded scarlet; fine form and very fragrant.

La Reine. H. P. Deep pink flowers, large and fragrant; hardy and productive. One of the best of the Hybrid Perpetuals.

Mad. George Bruant. H. R. Flowers large size, semi-double, and produced with remarkable freedom in clusters of five; fragrant buds are beautifully formed, long and pointed. Color pure glistening white.

Mad. Masson. H. P. Blooms nearly all the time, bearing numbers of large, double flowers of unusual beauty and wonderful fragrance; clear, bright red.

Magna Charta. H. P. Extra large, full flowers, very double; of fine form and sweet; clear, rosy red, beautifully flushed with violet crimson; sure and profuse bloomer; long stems.

Madam Plantier. J. One of the hardiest June roses. An enormous bloomer and covered with snow white flowers every season without attention.

MARGARET DICKSON

Margaret Dickson. H. P. A large and handsome white rose of extra vigorous growth. Its large petals are thick and shell shaped, tinted flesh next to center. Foliage is dark and thick.

Marchioness of Lorne. H. P. Long, handsome buds, opening into large, full cupped flowers, of rich, shining rose color, shaded carmine; perpetual blooming.

Multiflora. C. A vigorous variety, of first merit, and useful as a climber and lawn ornament. A dense bush of pendulous branches which are covered with masses of creamy white flowers; double.

Memorial. C. (Wich.) Makes a beautiful display of blossoms, single and very large; pure satiny white with bright golden center.

M. P. Wilder. H. P. Standard variety. Double red, very popular and very fine.

Mrs. John Laing. Pink, large, fine form, strong stems, fragrant. Profuse bloomer.

Moss Crested. M. Deep pink colored buds, surrounded by a mossy fringe and crest; free from mildew. A fragrant and very beautiful rose.

Nova Zembla. Of the Rugosa type. Double white. Unusually large blossoms for this species.

PAUL NEYRON

Paul Neyron. H. P. Deep rose color, good tough foliage, wood rather smooth. A free bloomer. Very desirable as a garden rose.

Philadelphia Rambler. C. Lighter crimson than the Crimson Rambler, also more double and a larger flower. Very free bloomer and strong grower.

Prince Camille de Rohan. H. P. Intense velvety crimson, shaded maroon, nearly black in appearance. Handsome rose, esteemed for its magnificent fragrant flowers which are produced freely.

Prairie Queen. C. Clear bright pink, sometimes striped. Flowers large, double and full; blooms in clusters.

Princess Adelaide. M. Pale rose, of medium size and good form. Foliage often blotched or variegated. Good in bud and flower.

Red Moss. Large, full, deep crimson, perfectly globular. A very fine variety.

Rugosa Rubra. Japanese variety. Flowers, single, of most beautiful bright rosy crimson; succeeded by large berries of a rich, rosy red color, and a great addition to the ornamental character of the plant. Makes a beautiful low hedge. We also carry a white flowered form of this variety.

Rambler Crimson. C. Flowers are a bright, cheerful shade of crimson, and the great size of the clusters makes it especially attractive. The flowers are double, about the size of cherry blossoms. A rapid grower. Also comes in white, pink and yellow, but these are not as hardy as the crimson variety.

Seven Sisters. C. Blush, tinged and striped with various shades. One of the old fashioned favorites.

Trier. C. A strong growing climber of the Rambler type, with great trusses of pale rose colored flowers, changing to white. Blooms continuously all summer.

Tausendschon. C. "Thousand Beauties". Blooms profusely from the beginning of June until the last of July. Flowers appear in large clusters, of splendid size and quite double. Colors run from delicate balsam thru the intermediate shades of bright rose and carmine, with white, yellow, and various other delicate tints showing. A strong grower.

Taunus Blumschen. C. Similiar to the Crimson Rambler in habit but the flowers are rose pink in color, succeeded by clusters of scarlet berries which add to the attractiveness of the plants in autumn.

Tree Rose. No handsomer ornamentals can be found for the lawn or garden. They stand three to four feet high, and every individual bud and blossom can be seen. We can supply specimens in the various shades of red, pink and white. Our tree roses are entirely grown on hardy wild rose stocks.

Tree Rose Weeping. A weeping type of the above. It is the Crimson Rambler grown on the wild rose standard.

Ulrich Brunner. H. P. Brilliant cherry red, a very effective color; flowers of fine form and finish, carry well upon the plant. Petals of great substance; plants, vigorous, hardy, and resist mildew.

Hansen's Hybrids

SAPA. For description see page 89.

Sapa Cross between Sand Cherry and the Sultan Plum. Fruit is a dark blue, glossy skin, deep wine, red flesh of the Japanese type. Trees frequently fruit when only one year old. This variety took first prize as Seedling Plum at the Minnesota State Fair 1909. A high compliment to this variety. Splendid for eating out of hand or canning. Tree very hardy. Pit small. Fruits early in the season.

Opata Cross between Sand Cherry and Gold Plum. Tree vigorous, fruit dark purplish red, flesh green, quality delicious, pit small, season early, fruits second year after transplanting.

Sansota Cross between the Sand Cherry and DeSota Plum. Fruit is round, dark blue when fully ripe. Flesh yellowish green, splendid quality, tree vigorous in growth, bears second year after transplanting.

Cheresota Somewhat oblong in shape, average size about $1\frac{1}{2}$ inch diameter, color bluish black, flesh yellowish green, in quality resembles the Sansota. A desirable acquisition to Northern fruits.

Hanska Bright red, heavy blue bloom, firm flesh, good quality, rich fragrance, bears early in abundance. When cooked, flavor of Apricot. A cross between the wild American plum and the firm fleshed fragrant Apricot plum so popular in the orchards of California.

OPATA. Fruit grown on trees three years old.

Windbreaks

Canadian Poplar Name is appropriate, tree extremely hardy, rapid and vigorous in growth. Resembles the male Cottonwood, but is more attractive and more shapely. The coming tree for the Northwest, because of its resistance to drought and extreme changes.

Balm of Gilead A very valuable tree, well adapted to extreme locations in the Northwest, especially to dry sections of the country, demand increasing wherever its merits are known. Bark, buds and foliage fragrant, tree comely in shape, also makes splendid Windbreak.

Silver Poplar One of the hardiest trees for either Windbreak or Ornamental purposes. Upper part of leaf a deep green. Under side, rich silvery color. Resembles the Maple in shape. Contrast of under and upper side of the leaf is very pronounced. Tree hardy, vigorous grower, desirable in every respect.

Arbor Vitæ as a road side hedge.
Useful and ornamental.

ARBORVITÆ—*Thuya*

Ornamental evergreen trees of narrow, pyramidal habit, with much ramified branches; the branches are arranged frond-like. They are all of regular, symmetrical habit, indispensable in formal gardening and some of them are very beautiful and desirable as specimens. The well known *T. occidentalis* is one of the hardiest and best evergreens for shelter-belt and timber planting in the North.

Common American Arborvitæ. (*T. occidentalis* also erroneously called White Cedar.) Med. The best known and most valuable of this genus. As a specimen in good soil, it often attains a height of sixty feet and has been much used for telegraph poles. In cultivation this species is best known from its wide spread use as an ornamental hedge. It is of a bright, healthy green with an abundance of foliage and of natural pyramidal shape adapting it to hedge purposes. As it stands severe pruning, it is easily maintained in a low hedge of almost any desirable height or shape. Being one of the few Evergreens that will grow in wet soils, this becomes a valuable species for many conditions of ornamental planting. It is also a very handsome specimen Evergreen if trimmed properly at the crown so as to thicken up the branches and retain the lower ones. For shelter-belt planting and prairie forestry the American Arborvitæ is without a rival for its vigor and hardiness; either alone or mixed with Evergreens or deciduous trees, it is indispensable for these purposes.

Pyramidal Arborvitæ. (*T. orientalis* var. *pyramidalis*.) Sm. to Med. A densely branched Arborvitæ, of perfectly columnar form. One of the most remarkable Evergreens in respect to its symmetry. Like the Irish Juniper, it holds its perfect fastigiate shape thruout life without trimming or pruning. It is perfectly hardy and will succeed anywhere that the American Arborvitæ grows. A very valuable variety for many kinds of ornamental planting and a rich and attractive variety wherever columnar effects are desired.

EVELYN APPLE

A seedling of the Wealthy; originated in Minnesota. Deep red; medium large; resembles the Wealthy in shape and texture. Keeps until March. Does not fall off the tree like the Wealthy. Sub-

EVELYN APPLE

acid; fine for eating or cooking. Tree hardy. One of the best late acquisitions to Northern fruits. This variety has taken first prize at Minnesota Horticultural Society for best seedling. The originator thought so much of this apple that he planted 1500 trees of this variety alone, and named the tree in honor of his wife. That is praise enough.

SALOME APPLE

Hardy in Southern Minnesota. A late keeper, good until April. Bears young and annually. Fruit medium large, oblong; color green, striped with red; excellent quality.

WINDSOR CHIEF APPLE

A great favorite in Wisconsin. Keeps until March. Medium size; red; excellent quality; good for cooking or eating out of hand; splendid commercial variety. Tree considered hardy.

TOKA PLUM

One of Prof. Hansen's New Fruits. Originated at South Dakota Experimental Station. Bears annually even when other varieties fail. Tree strong and vigorous grower; early and heavy bearer of handsome fruit; color red; flesh firm; splendid cooker. A valuable acquisition to the plum family.

HUNGARIAN GRAPE

Similar to the Beta Grape in size and hardiness but superior in quality. Heavy bearer. Does not have to be laid down for covering in the southern part of Minnesota and similar climatic conditions. Will be a great favorite in the North when its merits become better known.

HUNGARIAN GRAPE

EVERBEARING STRAWBERRIES

This variety has made such a splendid record for itself that it is here to stay. Every lover of strawberries should have it in his garden. It bears from June until November. The past few years have demonstrated the following points of excellence:— healthy foliage; hardiness of plant; early and heavy bearer; excellent quality; very sweet. Amateurs and professional horticulturists are recommending this most valuable species. In time these varieties will supersede most of the standard varieties which now fruit only in the early summer. Demand great; supply limited. We can furnish them true to name in Americus, Superb and Progressive, the three best varieties now known to the trade.

EVERBEARING STRAWBERRIES

DESIRABILITY OF WINDBREAKS

Protection from hot winds.

Protection to crops.

Source of revenue for timber; fence posts.

Increase of value to property.

Protection to buildings, live stock, from snow, etc.

Send for our windbreak circular. It contains illustrations and splendid arguments. Become familiar with them. Read what Pres. Worst of the North Dakota Agricultural College says: "There ought to be windbreaks placed across the state of Dakota a mile apart. They would be of inestimable value to the farmers and the people of the country." He is an authority and knows whereof he speaks. He is not working for personal interest but is working for the interests of the people of the state of North Dakota. Therefore his words ought to carry weight. The forest windbreak is one of the greatest sources of revenue to the farmer. It ought to be one of the greatest sources of revenue to the salesman. It is to the advantage of the customer, the salesman and the house that windbreaks be sold, planted and grown every where.

LANDSCAPE DEPARTMENT

We can furnish a landscape architect at reasonable rates, who will plan your grounds, make up a blue print and recommend a planting list in connection with the same.

SCHOOL GROUNDS

A great interest is being taken in the improvement of all public grounds, especially school grounds. Why should not the exterior of school buildings be made as attractive as the interior. It is an influence that is elevating and lasting.

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Broad fields of shelter belt stock in the Jewell Nurseries. Millions of one and two year old Ash, Maple, Poplar, Willow, Box Elder, etc., are shipped annually.

OPATA—ONE OF PROF. HANSEN'S CELEBRATED HYBRID CHERRIES