Historic, archived document

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

62.97

1929-30

LIBRARY

RECEIVED

SEP 3 1924

U. S. Department of Agriculture

Catalog

McKay Nursery Company

Madison, Wisconsin

The Home of Good Nursery Stock

Trees, Plants and Shrubs for the Northwest

INDEX

Abies	29	Dutchman's Pipe	47	Phlox	46
Acer	24	Elder	36	Physostegia	46
Achillea	44	Eleagnus	32	Picea	30
Aesculus	23	Elm	23	Pine	29
Ailanthus	26	Evergreens	29-30	Pinus	29
Alder, White	32	Fagus	22	Plane Tree	26
Almond, Flowering	31	False Chamomile	44	Platanus	26
Althea	33	False Dragon Head	46	Plums	10-11
Ampelopsis	47	Fir	29	Plum, Flowering	36
Amygdalus	31	Forsythia	32	Poplar	25
Anemone	44	Foxglove	45	Poppy, Oriental	46
Apples	3-7	Fraxinus	22	Populus	25
Apricots	12	Fringe Tree	33	Privet	34
Aquilegia	44	Gaillardia	45	Prunus	36
Arbor-vitae	29	Gladiolus	48	Pyrus	23, 32
Aristolochia	47	Gleditschia	23	Quercus	25
Ash	22	Golden Bell	32	Quinces	12
Asparagus	13	Golden Glow	45	Quince, Flowering	32
Aspen	25	Gooseberries	14	Raspberries	17-18
Baby's Breath	45	Grapes	15-16	Rhamnus	36
Barberry	31	Gymnocladus	24	Rhodotypos	36
Basswood	24	Gypsophila	45	Rhubarb	13
Beech	22	Hemlock	29	Rhus	33, 36
Berberis	31	Hibiscus	33, 46	Ribes	36
Betula	22	Hollyhock	45	Rose Mallow	46
Birch	22	Honey Locust	23	Rose of Sharon	33
Bittersweet	47	Honeysuckle, Bush	34	Roses	38-42
Blackberries	18-19	Honeysuckle, Vine	47	Salix	26
Blanket Flower	45	Horse Chestnut	23	Sambucus	36
Bleeding Heart	44	Horseradish	13	Sedum	46
Boltonia	44	Hyacinths	48	Shrubs, Deciduous	31-37
Buckthorn	36	Hydrangea	33	Snowball	37
Bulbs	48	Indian Currant	37	Snowberry	37
Butternut	22	Iris	45	Sorbus	25
Calycanthus	31	Ivy	47	Spirea	36-37
Canna	48	Juglans	22	Spruce	30
Catalpa	23	Juniper	30	Stonecrop	46
Cedar, Red	30	Juniperus	30	Strawberries	19-20
Celastrus	47	Kentucky Coffee Tree	24	Sumac	36
Cerasus	23	Kerria, White	36	Sweet Pepper Bush	32
Cherries	8-9	Larch	24	Sweet-scented Shrub	31
Cherry, Flowering	23	Larix	24	Sycamore	26
Cherry-Plums	9	Larkspur	44	Symphoricarpos	37
Chrysanthemums	44	Ligustrum	34	Syringa	36
Clematis	47	Lilacs	35	Tamarix	37
Clethra	32	Lily-of-the-Valley	45	Tecoma	47
Columbine	44	Linden	24	Thorn	26
Coreopsis	44	Lonicera	34, 47	Thuya	29
Cornus	32	Lycium	47	Tickseed	44
Crab Apples	7	Maple	24	Tiger Lily	46
Crab, Flowering	23	Matrimony Vine	47	Tilia	24
Crataegus	26	Milfoil	44	Tree of Heaven	26
Crocus	48	Mock Orange	36	Trees, Deciduous	22-26
Currants	14	Monarda	45	Trumpet Flower	47
Currant, Flowering	36	Morus	25	Tsuga	29
Cydonia	32	Mountain Ash	25	Tulips	48
Dahlias	48	Mulberries	12, 25	Ulmus	23
Daisy, Shasta	44	Narcissus	48	Viburnum	37
Day Lily	44, 45	Nut Trees	12	Vines	47
Delphinium	44	Oak	25	Virginia Creeper	47
Deutzia	32	Oleaster	32	Weigela	37
Dicentra	44	Peaches	12	White Kerria	36
Dielytra	44	Pears	8	Willow	26
Diervilla	37	Peonies	46	Windflower	44
Digitalis	45	Perennials	44-46	Wistaria	47
Dogwood	32	Philadelphus	36	Yarrow	44
				Yucca	46

Packing Building on Railroad Side Track, Waterloo, Wisconsin.

Introductory

WE TAKE pleasure in presenting this catalogue to our patrons and friends and thank them for their support and recommendations. Great care is taken by us to select first-class stock in executing all orders, and our customers can rest assured that we will always send the best procurable at all times. **Our nurseries have been established for twenty-five years**, therefore we are familiar with varieties best adapted for the Northwest. We have taken great pains in the revision of our list to cull out all worthless varieties, and to catalogue only such varieties as we consider of special merit.

We are constantly on the watch for new things, both in the fruit and ornamental line, and we are adding such to our list as fast as their behavior proves beyond reasonable doubt that they are of value, and we believe the list which follows contains all of the varieties which are of value throughout the Northwest.

OFFICES AND NURSERIES. All correspondence should be addressed to Madison, Wis., where our main offices are located. Our nurseries are located at Waterloo, Wis., on the Chicago, Milwaukee & St. Paul Railway, twenty-four miles east of Madison.

Our location furnishes a quality of soil best suited to produce the healthiest conditions of growth, with solid, firm texture of wood, with abundant fibrous roots, so necessary to successful transplanting, and enables us to offer the products of our nurseries with entire confidence to planters in all sections of the country.

SATISFACTORY GUARANTEE. We guarantee our stock to be first-class and to be delivered in good condition. We are most careful to have all plants and trees correctly labeled and hold ourselves prepared to replace, on proper proof, all that may prove untrue to label, or to refund the amount paid therefor; but it is mutually agreed between the purchaser and ourselves that, in case of error on our part, we shall at no time be held responsible for a greater amount than the original price of said stock.

OUR PRICES. We do not claim to sell for less money than others, but **quality** is the first consideration. Cheap nursery or ornamental stock is dear at any price. We find that the best class of people consider quality first and being assured of that, they are satisfied to pay a fair price for a satisfactory article. Notwithstanding the high quality of everything sent out, our prices will be found lower than those of many companies which endeavor to maintain the same high standard that we have adopted.

IN ORDERING. Write the name, number and size of each variety plainly, so as to avoid errors, and use order sheet which accompanies catalogue. In filling orders, we reserve the right, in case we are out of a variety ordered, to substitute another of equal merit, unless customer writes "no substitution" in the order. We recommend that purchasers leave the selection of varieties with us as far as possible, as our experience enables us to select such sorts as are best adapted to the locality.

It is also better to order early and have stock reserved. We are glad to book orders at any time of the year and make shipment when desired.

We are the largest growers in **Wisconsin** of strictly first class nursery stock, therefore are in a position to give you satisfactory service.

INSPECTION. Our nurseries are annually inspected by the state entomologist, as required by law, and we hold his certificate that our stock is free from injurious insects and contagious diseases.

General Information

CARE OF STOCK WHEN RECEIVED FROM THE NURSERY. As soon as the trees and plants are received, the bundles should be opened, removing all straw and packing, and the roots thoroughly sprinkled, then heeled in very moist ground, so that the mellow earth will come in contact with the roots and thoroughly protect them from the air, having earth tamped solid about them. Wet down thoroughly and cover wet soil with two or three inches of mellow earth. In planting take up only a few at a time and never allow them to lay exposed to air and sun.

THE PREPARATION OF THE SOIL. For fruit trees the soil should be dry, either natural or made so by thorough drainage, as they will not live or thrive on a soil constantly saturated with stagnant moisture. It should also be well prepared by twice plowing, at least, beforehand, using the subsoil plow after the common one at the second plowing. On new, fresh lands manuring will be unnecessary, but on lands exhausted by cropping, fertilizers must be applied, either by turning in heavy crops of clover or well decomposed manure or compost. To ensure a good growth of fruit trees, land should be in as good condition as for a crop of wheat, corn or potatoes.

THE PREPARATION OF THE TREES. In regard to this important operation, there are more fatal errors committed than in any other. As a general thing, trees are planted in the ground precisely as they are sent from the nursery. In removing a tree, no matter how carefully it may be done, a portion of the roots are broken and destroyed, and consequently the balance that existed in the structure of the tree is deranged. This must be restored by a proper pruning, adapted to the size, form and condition of the tree.

On all fruit trees the branches should all be cut back to within three or four buds of their base. This lessens the demand upon the roots, and enables the remaining buds to push with vigor. Cut off smoothly all bruised or broken roots up to the sound wood. In case of older trees, of extra size, the pruning must be in proportion; as a general thing it will be safe to shorten all the previous year's shoots to three or four buds at their base, and where the branches are very numerous some may be cut out entirely.

PLANTING. The ground should be well prepared and holes dug larger than necessary, so that they can be partly refilled with surface soil. The earth should be firmed very thoroughly around the roots, as it is disastrous to allow the air to enter. When the earth is nearly filled in, a pail of water may be thrown on to settle and wash in the soil around the roots. It is not necessary to water except in dry weather.

Do not plant trees too deep. After the ground settles they should stand as they did in the nursery. Dwarf pears should be planted three or four inches deeper.

CULTIVATION AND MULCHING. When trees are planted, keep the orchard well cultivated up to about July 1 to 10, and for this purpose there is no better practice than to grow a crop of corn in the orchard, leaving the stalks to stand for winter protection; but where this is not practicable, cultivate the land to above date and then sow to some cover crop. Do not seed down an orchard so long as it can be avoided, but keep it cultivated as above indicated, and keep the soil well fertilized; but when the time comes that the orchard must be seeded down, sow to red clover and mulch the trees heavily so that grass will not grow within 6 or 8 feet of them. It is also good practice to spade up this mulched space about the tree each spring.

DIRECTIONS FOR WINTERING. When trees are procured in the fall, select a dry place where water will be well drained off during the winter months; then dig a trench a little longer than the trees to be heeled-in, with the lower end about 2 feet deep. Dig the trench broad enough to contain the trees when spread in a single layer; then remove all packing material from about the trees and spread them out in the trench. When this is done, sift in fine dirt until all the open spaces are filled among the trees and roots and they are covered several inches deep, then tramp firmly and fill up the trench, mounding up the dirt so that the tops will be covered at least 4 inches deep and the roots about 2 feet. Care should be taken to remove all material from the trench and its vicinity which might serve as nests for mice.

Number of Trees or Plants on an Acre

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

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

Suitable Distances for Planting in the Northwest

Apples, standard	20 to 30 feet
Pears, standard	16 to 20 feet
Pears, dwarf	12 to 15 feet
Cherries	16 to 20 feet
Plums	16 to 18 feet
Peaches and Apricots	16 to 18 feet
Currants and Gooseberries	4 to 6 feet
Grapes	8 to 10 feet
Raspberries and Blackberries	4 to 6 feet
Strawberries	1½ by 3 to 3½ feet

Showing Fruit Trees, Ready to be Packed for Shipment.

Block of Apple Trees Growing in Our Nurseries.

Fruit Department

Apples

The Apple has been justly styled "The King Fruit of the Temperate Zone." No other fruit is so widely grown or has such universal demand. No other fruit offers so many variations in quality and usefulness. None other gives such a long period for its enjoyment as a fresh fruit—very late keeping varieties lasting over until the early sorts of the following season are ripe.

We grow apple trees for particular planters. Our trees are dug, graded and packed by experienced men. There is an extensive area in Wisconsin adapted for Commercial fruit-growing. The necessary requirements are fertile, well drained soil, proper selection of varieties and the purchasing of healthy, well grown stock from a reliable Nursery Company. By following the above suggestions, success will crown your efforts.

The more hardy varieties are marked with a star (*) and will give good satisfaction in the Northwest.

Summer Varieties

***Duchess (Oldenburg).** A large, beautiful Russian apple, round, streaked red on yellow ground; tender, juicy, very acid. Fine for cooking. Bears early; productive. September.

Duchess of Oldenburg Apples.

Early Harvest. Medium to large; pale yellow; tender, with a mild, fine flavor. One of the first to ripen. Middle to end of August.

Golden Sweet. Large, yellow; a very fair, fine, sweet apple. Spreading, irregular, and productive. August and September.

***Livland (Lowland Raspberry).** Of Russian origin; color white, shading to crimson; flesh white; tree hardy, long-lived and succeeds very well North and South; very juicy and sweet. July to August.

Red Astrachan. Large, roundish, nearly covered with deep crimson, overspread with thick bloom. Juicy, rich acid, beautiful; a good bearer. August.

***Tetofsky.** Medium size, yellow ground, handsomely striped with red and covered with a whitish bloom; juicy, sprightly acid and agreeable. A stocky grower; very hardy and productive. July and August.

Wealthy Apple.

***Yellow Transparent.** Medium, white, changing to lemon yellow, smooth waxy surface; of good quality, with crisp flesh; very early, and, for an early apple, an unusually good keeper. Valuable for market. July and August.

Autumn Varieties

***Hibernal.** Origin, Russia. Season, November and December. This variety represents what is probably the hardiest type of the Russian race; adopted by many prominent horticulturists as a standard of hardiness. Tree is sturdy, vigorous, very spreading and productive.

***McMahon.** Large, round; almost white with faint blush; a very beautiful apple; flesh white, tender, tart, not very firm. A good cooking fruit. Tree vigorous and hardy as crab; bears young and abundantly. October to February.

Maiden Blush. Large, flat; pale yellow, with a red cheek; beautiful, tender and pleasant, but not high flavored. An erect grower, and a good bearer. Valuable for market. September and October.

***Okabena.** Extremely hardy, free from blight, fine spreading grower, early and very prolific bearer. Fruit large, handsomely striped, acid, resembling the Duchess so closely that it can be sold for that variety on the market, and it keeps at least a month longer. Originated at the home of Mr. H. J. Ludlow, Worthington, Minn. Season, September and October.

***Patten's Greening.** Tree rather crooked, extremely hardy, productive and an early bearer; fruit large and smooth; olive green, blushed with dull red; flavor pleasant, sub-acid. A superior cooking apple. October to December.

Plumb Cider. A variety introduced by J. C. Plumb, of Milton, Wisconsin. The tree came originally from Ohio, probably in 1844. It is vigorous, an early bearer, and very productive in alternate years. The flesh is greenish white, fine-grained, firm, juicy, sub-acid, of very good quality. November to January.

***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.

***Wealthy.** Origin, Minnesota. 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 dessert and cooking apple. Market demand never filled. Minnesota is justly proud of this variety.

Late Fall and Winter Varieties

Baldwin. Large, roundish; skin deep red; flesh juicy, crisp, sub-acid, good flavor. The best all around winter apple for New England and the Eastern States. Keeps splendidly. December to March.

***Bayfield.** One of the famous Perkins Seedlings known as No. 124. The tree is a very rapid grower, bearing large red apples of splendid quality that will keep well up to May 15th. This variety is destined to be one of the best winter apples grown in Minnesota and well adapted for large commercial orchard planting.

Ben Davis. The great market apple of the West and South, largely planted also in the East. One of the best for profit. It is a splendid keeper, and fine for cooking. December to April.

Delicious. Originated in Iowa and has every appearance of being hardy, with strong branches capable of bearing large crops of fruit. The apple is striped and marked with bright and dark red. The color is so deep on the cheek next to the sun that it is almost a solid crimson with a light blue bloom spreading over it; shape round and long tapering, of large and uniform size. This variety has a delightful flavor and is extremely valuable for either home or commercial orchard. It is a long keeping winter apple with a season from December to May.

***Dudley (North Star).** Much like Duchess only it is a winter apple, less tart and better quality. Perfectly hardy in the coldest climate. Originated in northern Maine and there considered their finest apple. Valuable for the North.

Gano. Similar, but superior to Ben Davis. It has all the good qualities in a higher degree, more brilliant colorings, runs more even in size and keeps fully as late. February to March.

Golden Russett. Medium, very tender, juicy, rich, sub-acid; high quality. October to January.

Grimes' Golden. Medium to large size, round, rich golden yellow, sprinkled with light gray dots; flesh crisp, tender, rich and juicy, sprightly. January to April.

***Goodhue.** This variety of the famous Perkins Seedlings is a splendid midwinter apple that will keep until February. It is larger than the Red Wing, has the same color markings, only slightly more pronounced. It is a much hardier, more vigorous tree than the Wealthy and superior as an eating and cooking apple. Like the Red Wing, it has swept the boards of the Minnesota State Fair and Horticultural Society meetings for the past eleven years, besides winning the Wilder and Gold Medals at Boston and St. Louis in 1903.

***Jumbo.** The largest of the famous Perkins Seedling apples, has similar markings as the Red Wing and Goodhue, is vigorous, hardy and a splendid bearer. It is a good substitute for Wolf River in size, but superior in quality of fruit, which keeps until January. The Jumbo was also of the collection that carried off the Wilder and Gold Medals at Boston and St. Louis in 1903.

Jonathan. Medium, roundish; yellow, nearly covered with red; fine grained, tender, and finely flavored. Tree slender and spreading with light-colored shoots. November to April.

King (King of Tompkins County). Very large, red-striped, handsome fruit of fine quality, with juicy, tender and rich flavor. Tree is an abundant annual bearer and succeeds best in the Northern States. December to March.

***Longfield.** A very hardy apple; early and abundant bearer. Fruit large, conical, yellow striped with red, sub-acid; in season during the fall and early winter.

McIntosh. Origin, Ontario, Can. Season, December and January. A choice variety of the Fameuse type. Tree vigorous with spreading head; a good annual bearer. Fruit above medium to large, highly perfumed; smooth polished yellow, almost covered with brilliant solid crimson, a beautiful fruit; flesh snow white, crisp, very tender, sprightly, aromatic, sub-acid; very good quality.

Northern Spy. Large, roundish-conical, often flattened, slightly ribbed; handsomely striped with red; flavor rich, aromatic, mild sub-acid, fine. Keeps through winter and late into spring.

***Northwestern Greening.** Origin, Wisconsin. Season, December to June. Tree a splendid vigorous grower. 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 and taking a place second only to the Wealthy as an all around market apple.

Newell's Winter. Originated in Wisconsin about 60 miles north of Madison. It is a seedling of the Perry Russet. The fruit is large, roundish oblate, and of a rich yellow color; flesh firm, juicy, yellowish, rich, sprightly and sub-acid. This Apple is one that will rate A No. 1 with any of the eastern Apples. It is a fruit that will keep all winter. Tree hardy and free from blight.

University Apple.

***Peerless.** Origin, Minnesota. 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 but not rich. Tree vigorous, upright.

***Peter.** Originated at Excelsior, Minn., from seed of the famous Wealthy. In quality, its equal, and in season, from four to six weeks later. The tree is a strong upright grower.

Pewaukee. Origin, Wisconsin. Season, December to March. Tree spreading, round topped and vigorous. Fruit large, yellowish green, striped and shaded with dull red, overlaid with a bluish bloom. Flesh yellowish, firm; juicy; flavor sub-acid.

***Red Wing.** Originated by T. E. Perkins of Red Wing, Minn. It is a long keeping winter apple, slightly larger and finer in appearance and quality than the Wealthy, streaked with red on a yellow background and shaped like Malinda; has enough acid to make it cook nicely. The Red Wing has taken the highest premiums at the Minnesota State Fair for the past eleven years, besides taking the Wilder Medal at the meeting of the American Pomological Society at Boston, Mass., in 1903, in competition with all of North America, and Gold Medal at St. Louis World's Fair the same year, in competition with all comers. The parent tree bore 24½ bushels of apples in 1913. Will keep until May.

Rome Beauty. Large, yellow, and bright red; medium quality. December to March. Not very hardy in Wisconsin.

Scott's Winter. Originated in Vermont, and is hardy in the severest climate. Tree a thrifty grower, an early and profuse bearer. Fruit medium, roundish; deep red and light red in blotches and streaks; flesh yellowish white, slightly reddened near the skin, rather acid and good in quality. Keeps until spring.

Stark. A long keeper. Large, roundish; greenish yellow, shaded and striped with red; flesh yellowish, rather coarse, juicy, mild and sub-acid. January to May.

Red Wing Apple.

McIntosh Apple.

Snow (Fameuse). Medium, deep crimson; flesh snowy-white, tender, melting and delicious; tree vigorous with dark wood; a fine dessert fruit; valuable for market; does well in the North. November to January.

Talman Sweet. Medium, pale whitish yellow; flesh white, fine grained; very hardy and productive. The best winter sweet apple for home and market. November to March.

***University.** A seedling of the Duchess. Tree is a very vigorous and spreading grower; fruit large, very regular; surface a clear yellow on sunny side; flesh sub-acid; quality good. Tree hardy.

Walbridge. Medium size; pale yellow, shaded with red; flesh crisp, tender, juicy. Hardy, productive; late keeper. January to May.

Windsor Chief. 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.

Winesap. The well-known deep red market apple of the West and Southwest. Of medium size and fair to medium quality. Productive; keeps from December to March. Has been popular for over one hundred years, and is favorably regarded for both market and family use.

Northwestern Greening Apple.

Hyslop Crab Apples.

Crab Apples

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

Hyslop. Red, not striped; fruit large, roundish ovate, produced in clusters; color dark rich red, covered with thick blue bloom; flesh inclined to yellow, sub-acid. Tree hardy and vigorous. November.

Martha. Origin, Minnesota. Season, September and October. Another of Peter M. Gideon's famous originations and one of the most largely planted crabs today. Fruit large, yellow with heavy blush of light red; flesh fine grained, firm; flavor sub-acid, very juicy and exceptionally fine for cooking.

Minnesota. 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.

Red Siberian. Large, strong grower; pale red yellow; good quality. Tree large, with coarse foliage; young bearer.

Transcendent. A beautiful variety of Siberian Crab. Red and yellow. August. Tree bad blighter.

Whitney (Hybrid) (Whitney No. 20). Season, August and September. Fruit large to very large for a hybrid; yellow, striped with red and mostly covered with red on sunny side; flesh yellow; very juicy and fine grain; flavor rich and almost sweet.

Delicious Apple.

Kieffer Pears.

Vermont Beauty. Tree hardy, healthy and productive. Fruit medium size, skin yellow, nearly covered with carmine; excellent quality. October.

Pears

We do not recommend Pears for general planting in the Northwest, however there are many localities where they do well. They succeed best in a well drained clay soil. The list selected is reduced to such as have been well tested and proved valuable. We recommend the Duchess as a Dwarf variety.

Bartlett. Large, buttery and melting, with very rich flavor. A vigorous and erect grower; bears young and abundantly. Middle of September.

Clapp's Favorite. Very large; color yellowish green to full yellow when ripe; marbled with dull red in the sun; covered with small specks. Melting and rich; should be gathered early; tree vigorous. August and September.

Duchess d'Angouleme. Generally planted as a dwarf and is more valuable when so planted; very productive; fruit very large and somewhat irregular; color dull greenish yellow; of good flavor and very juicy. September to October.

Flemish Beauty. Large, beautiful, melting, sweet. Very hardy and fruitful. September and October.

Kieffer. The tree has large, dark green glossy leaves, and is of itself very ornamental. It is an early and very prolific bearer. The fruit is of good quality when thoroughly ripe. Valuable for table and market. October and December.

Seckel. The standard of excellence in the pear, small but of the highest flavor. Tree a stout, slow, erect grower. September to October.

Cherries

Possibly no fruit is attracting more attention at the present time than the Cherry. Fruit-growers in parts of Wisconsin have been able to get a return of from eight hundred to one thousand dollars per acre. The leading commercial varieties are Early Richmond and Large Montmorency. Cherries bear young; the third year after planting, orchards that have received proper care will bear enough fruit to pay entire cost of trees and cultivation up to that time.

Hardy Varieties

Early Richmond. Probably the most popular variety of the Central States, where it is the hardiest cherry of its size. Exceedingly productive and very regular in bearing. The fruit is dark red, medium to large, and of a sprightly and characteristic flavor. Unsurpassed for pies, puddings, and other similar uses. June.

Montmorency Cherries.

CHERRIES—Continued.

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

Homer. A valuable seedling variety, originating at Homer, Minnesota. Distinctly of Morello type; fruit medium; flesh juicy, rich and of excellent quality; flavor very similar to Early Richmond; color dark red. Season medium.

Montmorency, Large. Tree very hardy and immense bearer; commences to fruit while young and is loaded annually with fine crops; fruit very large, fine flavor, shining red; valuable everywhere; a week later than Early Richmond; finest acid cherry.

Wragg. Large, roundish, heart shaped; dark crimson and when fully ripe, black or nearly so; flesh and juice light crimson, firm and good, very productive; one of the hardiest and is usually a sure cropper.

Semi-Hardy Varieties

Black Tartarian. 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.

Napoleon. Pale yellow, with a bright red cheek; very firm, juicy, and sweet.

Governor Wood. Large, rich, light yellow with red cheek; juicy and sweet; late June.

Windsor. Very large, liver colored, finest quality; very vigorous and productive. Firm and excellent for shipping. Very late.

Early Richmond Cherries.

Prof. Hansen's Cherry-Plums

Prof. N. E. Hansen of the State Experiment Station, Brookings, S. D., one of the leading horticulturists in America and authority upon horticulture in the Northwest, has been an extensive traveler and was sent by the government to Siberia to select hardy varieties of seeds and fruits which would be adapted to the severe climatic conditions. His explorations and experiences have resulted profitably to the people of this country. He has originated new fruits of great value and importance to all sections of the Northwest. The most important features are the extreme hardiness and productiveness of the fruits which he has brought out. The varieties we offer have been thoroughly tested in the North and have proved perfectly hardy even on the bleak prairies of North Dakota.

Opata (Sioux Indian name for Bouquet). A cross between the Dakota Sand Cherry and the Japanese Gold Plum. Tree is a good grower, an early and heavy bearer. The fruit is one inch or more in diameter and is excellent for eating out of the hand as well as for table and cooking purposes. It is a dark purplish red with blue bloom; pit small; flesh green and firm and partakes of the rich sweetness of the Gold Plum. In Minnesota it bears as early as the last of July or first week in August.

Sapa (From Indian word meaning Black). A cross between the Dakota Sand Cherry and the Japanese Sultan Plum. Tree moderately free grower and naturally rather crooked when young. The color of the fruit is a glossy dark purple and the flesh is rich, dark red, size one inch or more in diameter. The fruit buds often set heavy the first year, bearing quite a crop the second year. The five to six foot trees will bear the next year after they are transplanted.

Compass Cherry-Plum

Compass (Originated by M. H. Knudson, Springfield, Minnesota). A cross between the Dakota Sand Cherry, Morello Cherry and Miner Plum. It is absolutely hardy, wonderfully prolific, frequently producing fruit on young trees in nursery row. In shape, size and coloring of the fruit the characteristics of the Plum and Cherry are about equally divided. Color bright red, deepening as it becomes well ripened, until it reaches a rich dark wine color. Valuable for canning and preserving. Anyone planting trees should not be without the Compass and then you would never be without good fruit.

Sapa Cherry-Plums.

Waneta.

Plums

During the last few years the planting of Plums has increased enormously. There is a constant and steady demand for good fruit and the prices have been the largest ever known.

The Plum is the natural tree fruit of the North. In its wild state, even as far North as Manitoba, distinct varieties of large size and most excellent qualities have been found by pioneer settlers. Practical horticulturists have cultivated these varieties and cross-fertilized

them with better ones, until now there are a large number of plums of strictly native origin that in size, quality, and productiveness rival foreign varieties, which can be grown only in mild climate. We advise planting native varieties, which are absolutely hardy in the Northwest.

Brittlewood (Americana). In form it is oval round. Large size, smooth but not glossy, with thick bloom. Skin thick, slightly stringent, in good shipping texture. Flesh firm and meaty, of good quality; flavor sub-acid. Bulletin No. 87, Wisconsin Experiment Station, describes it as one of the largest plums grown there.

De Soto (Americana). Probably the most grown of any plum of the Americana group. Found wild on the Mississippi at De Soto, Wisconsin, and introduced in 1863 by Elisha Hall. Quality unsurpassed, and productiveness almost too great; tree should be well fed and the crop thinned to prevent overbearing and improve size of fruit. Season medium.

Forest Garden. Hardy, early, a heavy bearer of juicy, sweet, and rich plums of dull, purplish red, with minute yellow specks and thin bloom.

Hawkeye. Large to very large, round, oblong, purplish-red, skin thick, flesh good and firm. Tree vigorous and productive.

Surprise. A very fine variety introduced about 1899 by Mr. Martin Penning, of Sleepy Eye, Minn. Fruit large to very large; skin medium thick, tender, bright red, flesh pale yellow, meaty, and of fine flavor; quality extra good. Season medium.

Wolf. Large, dark red; good quality; extra fine for cooking and canning by reason of its being a freestone. It is a vigorous grower; entirely hardy, and an abundant annual bearer; one of the best.

Wyant. Large; round, oblong, purplered; skin thick; peels readily; flesh firm; freestone, and of excellent quality; native of Iowa, and hardy.

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

Loring Prize Plum

To encourage and stimulate and create a finer quality of plum, Hon. C. M. Loring offered a prize for a plum that would meet certain qualities including size, shape, color, flavor, smallness of pit, firmness and texture of flesh, together with general good characteristics of the tree. Such a plum was originated at Lonsdale, Minnesota, a few years ago and is now known as the Loring Prize Plum, which in spite of all competitors, received the unanimous reward of the committee. This plum is placed on the market for the first time this year and it is with a feeling of pride and confidence that we offer it, believing that it will not only quickly win its way, but will also prove a success wherever choice fruits are grown and planted. It is the largest and best plum for the northern planters today. It is a splendid commercial fruit, good for canning, delicious to

eat, has a small pit, is of a bright attractive color. The seed was the Burbank crossed by the DeSoto or Weaver plum. The size is from 1¾ to 2¼ inches in diameter. It is slightly oblong, of bright color, fleshy, like the Burbank and nearly Freestone, delicious in sweetness and mild in acidity. We consider it superior to the large red California plum that we see in the fruit stores. If canned when half ripe, it has a slight peach flavor attaining the pure plum flavor when ripe. It is a very heavy annual bearer, commencing to bear at the age of three or four years. It has perfect blossoms. The fruit has a strong stem and is not easily blown from the tree. It ripens early. The tree is a vigorous grower, with firm wood, and as hardy as any wild plum we have grown. In shape, the tree is medium spreading, the branches shapely and strong.

Loring Prize Plums.

Prof. Hansen's Hardy Plums

Prof. Hansen has originated a number of improved American Plums. We say improved, because they have been thoroughly tested and found extremely valuable and desirable. They will grow on sandy or heavy soil. May be planted for ornamental effects as well as useful. Trees of this class are desirable from every standpoint and every home should be supplied with these varieties.

Hanska (Indian name for Tall). This name is given because the tree is a very good grower, often reaching the height of twelve feet in four years. This is a cross between the Native Plum and the fine fragrant Apricot Plum of China. The fruit is splendid for eating out of the hand and when cooked retains the Apricot flavor. The size of the fruit is about one and one-half inches in diameter. The color when ripe is a bright red with a heavy blue bloom; flesh is firm, yellow, good quality, very fragrant.

Toka (Toka is the Indian word for Adversary). This is a cross between the Americana plum and the fragrant Apricot of China. It resembles the Hanska in some respects and may be planted with it with good success. The tree is remarkably strong and vigorous. In growth it may be called a model tree. It bears early. The fruit is dark red in color, very handsome, firm, large and a good shipper.

Tokata. Another of Prof. Hansen's originations. Hardy, and produces fruit young. Tree of a spreading habit. Fruit red; similar to Toka in size. Delicious quality.

Waneta. This wonderful large new plum is the latest addition to Prof. Hansen's productions. Following is Prof. Hansen's own description: "My belief is that in this variety I have combined the best points of the native and Japanese plums. It is probably the largest of the 10,000 seedlings. The size here at Brookings, S. Dak., in 1912, was two inches in diameter, weighing about two ounces. All reports indicate that the Waneta is everything that Prof. Hansen claims it to be. Its color is deep red, flavor is delicious. The tree is hardy and very prolific. Its size and quality, the hardiness of tree and great productiveness, are such that the demand will be great. May be planted with other Americana plums or with the Hansen Hybrids.

Japan and European Plums

These varieties are among those planted along Lake Michigan and 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. We can supply additional varieties.

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

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.

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.

Red June. Medium to large, roundish, conical, purplish red, handsome; flesh yellow, quality good.

Wickson. Very large, glowing carmine, with a heavy white bloom; flesh firm, sugary.

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.

Elberta Peach.

Mulberry Trees

These are sometimes classed among ornamental trees on account of their fine foliage and form. For the North, the Russian variety is the only one that should be planted.

Downing's Everbearing. One of the most prolific varieties, with large, black, sub-acid fruits. Its long bearing season has made it a universal favorite.

Russian Mulberry. Introduced to this country by Russian Mennonites and on account of its hardiness and ornamental appearance has been considerably planted throughout the West. The fruit is highly prized by the birds and it performs a valuable service by keeping them away from the garden.

Nut Trees

These trees are not only useful for shade and ornamental purposes, but bear an abundance of nuts which are very profitable. The growing demand for nuts is giving quite an impetus to the planting of nut trees. Many farms contain land that would be far better planted to nuts than anything else, and would pay better than farm crops, besides annually growing more valuable as timber.

Butternut. Sometimes called White Walnut. The tree greatly resembles the American Black Walnut, to which it is closely allied. The nuts are elongated, more oily than the walnut and less pronounced in flavor; some consider the quality superior. Yields well and is perfectly hardy. Grows twenty to forty feet.

Chestnut, American Sweet. The variety best known to commerce. Although smaller than some other sorts, the nuts are sweeter and more delicately flavored. Not very hardy in Wisconsin.

Walnut, Black. A native tree of large size and majestic form, beautiful foliage. The most valuable of all trees for its timber, which enters largely into the manufacture of fine furniture and cabinet ware, and brings the highest price in the market. Tree a rapid grower, producing a large, round nut of excellent quality. Grows 30 to 40 feet.

Peaches

Peach trees are not considered very hardy in Wisconsin; however, we have found favored locations where they have done well. The following are among the leading varieties, all of which are free-stone. We can supply varieties in addition to those listed herein.

Champion. Fruit is usually large, some specimens measuring ten inches; fruit rich, sweet, juicy, beautiful color; creamy white and crimson. A good shipper. August.

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

Crosby. Fruit 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. 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. August and September.

Apricots

The Russian varieties listed below are much hardier than other sorts. These have stood twenty degrees below zero without injury and are very desirable in favored parts of the Northwest.

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

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

Quinces

Quince trees should be planted in rich, deep, moist but well drained clay soil. We do not recommend planting of Quince in Wisconsin.

Orange. Large; roundish, with a short neck; bright golden yellow; very productive.

Champion. A large, late-ripening sort that produces good and constant crops. One of the best for sections not subject to early frosts.

American Sweet Chestnuts.

Asparagus

This delicious and healthful vegetable should be found in every garden. Nothing can be more easily grown and no plant will give so much good, healthful food for so little outlay. Set in the fall or spring, with the crown of the plant about three inches below the surface of the ground. Ten to twelve inches by two feet is a good distance to plant. Every fall give the bed a good coat of manure, working it in between the rows in the spring. Liberal applications of salt are also beneficial.

Conover's Colossal. Superior in size and quality; remarkably tender and fine flavored.

Columbian Mammoth White. A distinct variety of mammoth size, great yield and superior quality. Remarkable for 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:

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

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

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

Horseradish

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

Rhubarb.

Palmetto Asparagus.

Horseradish.

Our stock is carefully grown, dug and packed by experienced men. We give every order personal attention, no matter how small or how large. We make prompt shipment at proper time for planting and guarantee all stock to reach destination in the best of condition.

Let us suggest what to plant both in orchard and the decoration of your grounds. You will find our Landscape Service entirely satisfactory.

We offer dependable goods and the best of service. This means another satisfied customer with every order that leaves our nurseries.

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. An acre of Currants properly cared for will produce from one thousand to twelve hundred dollars worth of fruit annually. Currants are more easily handled than other small fruits, as they hang on the bushes from ten days to two weeks after they become ripe, without injury.

Black Champion. A variety from England. One of the best black currants yet introduced. Bunches very large, excellent flavor, strong grower and very productive.

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

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

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 today, being of a rich, mild sub-acid flavor with plenty of pulp and few seeds.

Red Cross. One of the later introductions. A strong growing variety with long clusters. Berry medium to large, bright red. Of mild and pleasant quality and fine flavor.

Wilder. A remarkable variety. One of the best grown. Very productive; bunches and berries large; splendid quality. Superior in every way to the common sorts. Should be largely planted for home and commercial purposes.

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

Perfection Currant.

to fertilizing and cultivation, with an occasional spraying. The interest and demand for this fruit is constantly growing. An acre will produce from eight hundred to one thousand dollars annually.

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. An excellent sort for family use and most 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.

Pearl. Similar to Downing, but fruit generally reported much 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.

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.

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

Smith's Improved. Bush moderately vigorous and exceedingly productive. Fruit large, pale yellow, thin of skin; of excellent quality for dessert or cooking. Grown from seed of Houghton. A valuable variety.

Downing Gooseberry.

Select Hardy Grapes

Everyone should have grape vines in the home garden. They require very little cultivation and the returns are so abundant. If proper selection of varieties is made, one may have grapes on the table for several months in the year. They can be trained over fences, trellises or doorways, and thus be ornamental as well as useful. To grow for market, they can be planted on hillsides that are unsuitable for other crops. They should in all cases have a free exposure to the sun and air.

The vineyard should be top-dressed with well-decomposed manure or ground bone; slacked lime ashes every third or fourth year is also beneficial. To secure the best results, annual and careful pruning is essential. Commencing with a strong two-year-old vine, such as we furnish, at time of planting cut back to within three or four buds of the roots. In November or December—as soon as the wood is thoroughly ripe—cut back the growth nearly to the ground, allowing but three or four buds to remain. Never prune close to the bud, but leave an inch or two of wood beyond. The following spring allow but two of these buds to throw out shoots; these will be from seven to ten feet in the fall, and should then be cut back to four or five feet. The next spring these two shoots should be fastened horizontally to the lower part of the trellis. When growth commences, allow only such buds to grow as will leave the upright from ten to twelve inches apart; as these grow, train them perpendicularly to the upper bars of the trellis. They should be allowed to bear but little this

year, as an over crop will injure the health of the vine. When the shoots have reached the upper part of the trellis they should be pinched to prevent further growth.

Concord Grape.

Agawam (Red). Bunch large, compact, shouldered, berry large, dark red, or nearly black; flesh tender, juicy, vinous and good quality; later than Concord.

Alpha Grape. The Alpha, a native vine, was found growing wild in woods belonging to St. John's University, Collegeville, Minn., by Brother William, a member of the institution, in 1901. It was then a vine about four years old, bearing a few bunches of fine large blue grapes. Later in the season he planted it in his vineyard of wild grapes without giving it any protection over Winter. The Alpha developed to a healthy, vigorous vine, free from mildew, bearing bunches of grapes of large size and good quality. Because of ill health and old age Brother William gave his vineyard to John B. Katzner of St. John's University, in 1907, who cut out the other wild vines and propagated the Alpha. The Alpha, being native, is a very hardy vine. Has endured every winter at Collegeville without any protection, for the last 18 years. When wood has well ripened, no danger that a cold of 40 below zero will injure it. Now growing and bearing at Thief River Falls and Stephan, Minn., 40 miles this side of Canadian line. Very prolific. First crops were 5, 10, and 54 bushel baskets. Many vines bear from 50 to 80 bunches. Normal years they change color about middle of August; perfectly ripe by 15th of September, requiring 30 to 35 days from time they turn blue till maturity. A delicious grape with a flavor not found in other varieties. Well grown bunches are more than 6 inches long. Very valuable for the North.

Beta. A cross between Carver and Concord; perfectly hardy, productive; fruit of medium size; early. The principal value of this Grape is in the extreme North where it will stand without protection.

Brighton (Red). Bunch medium to large, quite compact, flesh rich, sweet and best quality; color dark crimson, or brownish red; vine vigorous and hardy.

Alpha Grape.

GRAPES—Continued.

Campbell's Early (Black). The king of American grapes; a very strong, vigorous, hardy vine, with thick, healthy, mildew-resisting foliage and self-fertilizing blossoms; always sets its fruit well, and bears abundantly.

Clinton (Black). Bunches medium, compact; berries round, small with thin blue bloom, pulpy and juicy; hardy and late; good keeper and valuable as a wine grape.

Concord (Black). Too well known to need much description; is considered by many to be the best all around grape grown. Is extremely hardy, vigorous and productive; bunches large, compact.

Delaware (Red). One of the best red grapes; bunch small and compact; berry small, round, beautiful light red; flesh rich, vinous, sweet and delicious; best quality; a good market grape.

Janesville (Black). Been long 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 (Black). Bunch large, berry round with a heavy blue bloom, quality said to be better than Concord; hardy and prolific; a good market berry; ripens about two weeks before Concord.

Niagara (White). One of the leading white sorts; bunch large, shouldered, compact; berry large, yellowish white.

Pocklington (White). Vine very vigorous and hardy, berry a light lemon-yellow, tender, sweet, and fine aromatic flavor; very prolific.

Salem (Red). Bunches and berries large, coppery red; flesh tender, juicy, with slight pulp, of the very best quality; vine vigorous and faithful. Ripens with Concord.

Niagara Grape.

Worden (Black). Said to be a seedling of the Concord, and is a slight improvement on that variety; ripens a few days earlier, bunch large and compact.

Large planters buy our trees. They are particular buyers and judges of Stock of Quality. This is worthy of your consideration.

We use up-to-date, progressive methods in the growing, protection, care and handling of all stock, thus doing away with failure on the part of the planter.

We have the most modern and up-to-date facilities in the Northwest for the proper handling of Nursery Stock. As soon as dug all stock is hauled immediately into packing building, where it is carefully graded. Every order is selected and packed under cover and loaded directly into cars.

Moore's Early Grape.

Cumberland Raspberries.

Raspberries

This fruit should be had by every real estate owner. It succeeds best in a moderately rich, mellow soil. It should be planted in rows five or six feet apart, leaving the plants about four feet apart in the rows. They require good cultivation and that the ground be kept clear of weeds. Most of the suckers should be cut away to throw the strength into the stock for bearing. All the old canes should be removed immediately after the bearing season is over.

All the tender or half tender kinds will be greatly benefited during the winter if secured as follows: Raise the earth into a mound or bank between two hills or plants, and bend them down so as to meet and fasten them; cover with a little earth or coarse litter, which will preserve them perfectly until spring, when they should be loosened, raised and tied to stakes.

Columbian (Purple). The Columbian is a seedling of the Cuthbert, grown near the Gregg Black-cap raspberry, and believed to be a cross between the two. It is a most vigorous grower, canes 10 to 16 feet in length and often over an inch in diameter; fruit very large; color dark red bordering on purple; adhere firmly to the stem; seeds small; has a distinct flavor of its own, making it a most delicious table berry. For canning purposes it is much superior to any other.

Cumberland (Black). "The Business Black-cap." It is of wonderful productiveness, producing regularly and uniformly very large crops. In size the fruit is simply enormous; far surpassing any other variety. The berries run seven-eighths and fifteen-sixteenths of an inch in diameter.

Cuthbert (Red). A strong grower and very productive; large, bright red, fruit firm, of very fine quality. Season medium to late; a good one for market or home use. It is doing well everywhere.

Golden Queen (Yellow). One of the best yellow varieties grown.

Gregg (Black). Of good size, fine quality, productive and hardy, firm, sweet and rich, strong grower and good bearer; ripens late and evenly; good market berry.

Kansas (Black). Large, round, firm, moderately juicy, strong grower and very productive, ripens early; considered one of the best market berries on account of its handsome appearance.

King (Red). 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.

Louden (Red). This variety is a marvel of productiveness and hardy to the tips of its shoots. Its large and beautiful rich dark crimson fruits are of good flavor, ship better and hang longer after ripening than those of any other variety. Ripens mid-season.

Marlboro (Red). The largest early red; bright scarlet, sub-acid, pleasant and good; hardy and productive.

Minnesota No. 4 (Latham)

The Minnesota No. 4 Raspberry originated on the Minnesota Horticultural Grounds, at Zumbra Heights;

a strong grower and a great fruit. This grand new Raspberry possesses splendid market qualities and when this class of fruit sold during the season 1918 at \$5.00 to \$6.00 per case, it pays to plant Raspberries and to plant the best variety. The Minnesota No. 4 is hardy, needs no winter protection and has all the appearances of enduring as much as the Northern Pines.

Minnesota No. 4
Raspberries.

Plum Farmer (Black). One of the newer varieties of black caps. A vigorous grower and hardy. The fruit is large like the Cumberland but in appearance it has a grayish cast like the Gregg. It is earlier than either the Cumberland or Gregg and ripens all of its fruit in a very short time.

Sunbeam (Red). First sent out, spring 1906. Female parent a wild red raspberry, from Cavalier County, North Dakota, near the Manitoba line. Male parent, Shaffer's Colossal, from New York. Fruit of fair size and quality. Worthy of trial where raspberries winter-kill, as it has endured 41 degrees below zero without protection.

St. Regis (Red). This everbearing red raspberry bears the first season. The berries are large and beautiful and full flavored to the very last. The St. Regis is the only raspberry, as far as known, that is practically sure to produce a crop of fruit the season planted. Awarded the highest certificate of merit by the American Institute of New York.

This variety has been tested for several seasons and found free from disease, which cannot be said of some of the older kinds. The stock which we offer of this excellent variety originally came from the originator, hence we can supply our customers with the genuine Minnesota No. 4. **The Raspberry that has no equal for the North.**

Blackberries

The Blackberry is a native fruit in all the Northern States. The following cultivated varieties are recommended. It is one of the hardiest garden fruits in the catalogue.

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.

Blower. The largest of the blackberry family. Plant is upright and hardy. One of the most productive, a single plant producing over two thousand berries. Jet black. A good shipper. Ripens about July 15 and continues for six weeks.

Ancient Briton Blackberries.

BLACKBERRIES—Continued.

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.

Snyder. Medium size, no hard, sour core, half as many thorns as some other varieties, and they are nearly straight and short; extremely hardy, enormously productive. Ripens in good season.

Lucretia Dewberry. A variety of the low bush or running blackberry, ripening before black raspberries are gone. Fruit large, jet black, and very showy, often measuring from 1 to 1½ inches in length. Plant four by six feet, and cut the new canes back, not allowing them to get more than four or five feet long. Very easy to cover on account of its trailing habit.

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.

Brandywine (Perfect). A berry that differs from most varieties, in having broad, heart-shaped, bright yellow seeds and a very large calyx. A good plant maker, productive, firm and from medium to late in season.

Bederwood (Perfect). This is generally considered one of the very best varieties for profitable culture in the West. It is valuable either for home use or market.

Dr. Burrill (Perfect). (The Million Dollar Strawberry—The Gem of Perfection). This variety was originated by Dr. Reasoner, of Illinois, and is a cross between Dunlap and Crescent. A big cropper. Berries large, dark red, of the best quality, and uniform in size and shape. This new variety is a strong fertilizer; its season of blossoming and fruiting extra long. With long, strong roots, healthy foliage and heavy crowns, it is able to produce wonderful crops of fruit. **The coming popular mid-season variety.** It has a perfect blossom and need not be planted with other varieties.

Gibson (Perfect). A new variety of merit. Bears with Dunlap and Warfield, but owing to its productiveness, continues till quite late. Strong grower. Berry large, glossy red, good quality.

Glen Mary (Perfect). One of the very largest strawberries grown. Flavor delightful, sweet and rich. Owing to enormous size, they command a high price in nearby markets. It is a splendid strawberry for home growing and when given the proper cultivation very productive. Mid-season.

Minnesota No. 3 (Perfect). Hardy, productive, and delicious. This exceedingly productive variety was originated by Chas. Haralson, Supt. of State Fruit Breeding Farm at Excelsior, Minn. It is one of the hardiest varieties under cultivation. It begins fruiting a few days earlier than Dunlap, and under same conditions its fruiting season is about twice as long as Dunlap.

Senator Dunlap (Perfect).

A variety of great merit, and much admired. Fruit of large size, regular and attractive in form, deep red in color, firm and excellent in quality; season early and continues in bearing nearly a month. Plant somewhat resembles Warfield.

Stevens' Late Champion (Perfect). One of the best and most popular late varieties. Makes strong, vigorous plants which produce an abundance of fruit. The plants send out many runners that take root quickly and cover the ground if not restrained. Fruit and blossoms are well protected by the foliage. Fruit large, long, slightly flattened. Color deep red, flesh also red.

Dr. Burrill.

The Million Dollar Strawberry

Warfield (Imperfect). The Warfield is favorably known from the Atlantic to the Pacific and from the Gulf to Hudson Bay, and combines so many excellent qualities that it will be difficult to enumerate them all. It is a large, beautiful-shaped berry, with glossy dark red exterior that does not fade or become dull after picking. This characteristic is continued even after it is canned, which is one reason for its great popularity. The flesh is a rich dark red clear to its center; it is very juicy and just tart enough to give it a fine relish.

Fall or Everbearing Strawberries

What lingering doubts may have been felt as to the practical value of this new race of strawberries are rapidly vanishing in the light of experience. There is now scarcely a discordant note in the general praise of their qualities for the home garden, and the developments of the present season indicate a greater value for the market garden than had before seemed probable. They have been on trial over a wide territory for several years and have been found extremely hardy, foliage perfectly healthy, a good crop producer of excellent quality, fruiting exceptionally early and continuing to fruit until checked by severe frosts. We heartily recommend our patrons to give these varieties a trial, believing that they will prove one of the most interesting and valuable things that we have ever sent out of our nurseries. The blossoms should be picked off from newly set plants until they are well established.

Americus (Perfect). This is one of the most thrifty growers of any of the fallbearing varieties. It does not seem to be affected by the fall crop of fruit produced, and comes out in the spring looking as fresh and vigorous as a June bearing sort. The fruit is from medium to large in size, conical in shape, rich red in color and of a delicious flavor.

Progressive (Perfect). One of Mr. Rockhill's productions. A good plant maker, strong, with healthy foliage. Bears a crop the same season set. Fruit large, sweet and of the choicest flavor. Plant it and you will have berries from June until November.

Strawberry Plant.

Wright, Minn., July 25th.

McKay Nursery Company,
Madison, Wisconsin.

Dear Sirs:—A year ago last Spring I purchased through one of your agents some nursery stock. The trees did the best of any I have ever tried. The agent hasn't called again and I wish you would send me catalog and price list so I can order more of your excellent stock.

The Hansen Hybrids (Plums) I purchased from you are simply loaded. They did not freeze back an inch last winter, in fact all the trees we got from you came through the winter O. K.

I am pleased to recommend your Company for your stock is the best I have ever seen.

Yours truly,

L. P. GRAFF.

Oconomowoc, Wis., May 29th.

McKay Nursery Company,
Madison, Wis.

Gentlemen:—On my arrival here my gardener, Mr. Abitz, informed me that you had sent him three Plum trees to replace those which had "fallen by the wayside." I want to thank you for this and assure you that I appreciate it to the fullest. Let me avail myself of this opportunity to tell you that all of the trees we put out a year ago have stood the rigor of winter well and all without exception are in excellent shape. Some of the plums are in blossom.

Sincerely yours,

BENJAMIN R. CAHN.

Cuba City, Wis., May 8th.

McKay Nursery Company,
Madison, Wis.

Gentlemen:—Enclosed please find check to cover my account, \$100.78. I have bought considerable nursery stock in the last few years, but want you to know that none has been so entirely satisfactory as the shipment received from you this Spring. All the trees seem to be of good, healthy, and vigorous stock. There was not a scrub in the whole lot, and I wish to thank you for filling the order in such a satisfactory manner.

Yours very truly,

C. H. BARTLETT.

Montello, Wis., May 31st.

McKay Nursery Company,
Madison, Wis.

Gentlemen:—It is with pleasure that I enclose my draft for \$404.25 covering the delivery of trees and shrubs.

I also desire to express my complete satisfaction so far on the goods you furnished me, and also highly compliment your Mr. Wm. Knopf for the careful manner which he displayed in the superintending of same.

Yours very truly,

MONTELLO GRANITE WORKS,

C. S. Richter.

SILVER LAKE CEMETERY ASSOCIATION.

Portage, Wis., May 4th.

McKay Nursery Company,
Madison, Wis.

Gentlemen:—I take this opportunity to thank you for the consignment of trees and shrubs we received from you.

The stock was certainly some of the best I ever handled. I planted them about a month ago and as far as I can see now I do not think I will lose a one of the whole lot of about 500. Both trees and shrubs had a splendid growth of roots.

Thanking you once more, I am,

Yours truly,

HUGO W. MEYER.

Ornamental Department

A great many people are beginning to realize that by expending a little time and study they can have well-kept and attractive grounds, adding to the beauty and comfort of the home and increasing the value of the property.

Brief Suggestions to Planters

Each variety is described from the standpoint of its habits. As to height, we have adopted the following broad classification, which will give a fair idea of the comparative size of 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.

What to Plant. In this and similar climates, where great extremes of temperature are experienced, it is necessary to employ only the most hardy ornamental trees and shrubs. Impressed with the importance of this fact, and in order that our customers may be spared much disappointment and expense, we have omitted as far as possible, everything which is liable to suffer from severe cold.

Preparation of the Roots. Cut off smoothly all bruised or broken roots up to the sound wood. This prevents their decaying and hastens the emission of new roots and fibres.

Preparation of the Top. This consists in cutting back the top and side branches in such a way as to correspond with the more or less mutilated roots, as follows: Trees with branching heads should have the small branches cut clean out, and the larger ones, intended for the framework of the tree, cut back to within two or three buds of their base.

In cases where there is an abundant root and small top or few branches, the pruning need be very light, but where the roots are small and the top heavy, severe pruning will be necessary. These remarks are applicable to all deciduous trees and shrubs. Evergreens seldom require pruning, but Arbor-vitae and other Evergreens planted in hedge rows may be shorn immediately after planting.

Pruning. Pruning has the effect to render trees and shrubs unnatural and inelegant. We refer to the custom of shearing trees, particularly conifers, into cones, pyramids and other unnatural shapes. Every tree, shrub and plant has a habit of growth peculiar to itself, and this very peculiarity is one of its beauties. If we prune all trees into regular shapes we destroy their identity. The pruning knife should be used to assist nature, and operated with good judgment; to lop off straggling branches, to thin the head of a tree which has become too dense, and to remove dead wood.

Each shrub has peculiarities of habit and foliage, and we should aim to preserve them as far as possible. Judicious pruning to secure health and vigor is necessary, but trimming all kinds of shrubs into one form shows a lack of appreciation for natural beauty, to say the least. Weigelas, Deutzias, Forsythias, and Mock Orange flower on the wood of the preceding year's growth, hence the shrubs should not be pruned in winter or spring, but in June, after they have finished flowering, when the old wood should be shortened or cut out, thus promoting the growth of the young wood, which is to flower the following season.

Spireas, Lilacs, Altheas, and Honeysuckles may be trimmed during the winter or early in spring, but the branches should only be reduced enough to keep them in good shape. The old growth should be occasionally thinned out and the suckers and root sprouts removed when they appear. The best time, however, for pruning all shrubs is when they have done flowering. The Hydrangea paniculata grandiflora should be severely cut back and thinned early in spring.

Pruning Evergreens. Use the knife occasionally to thicken the growth and preserve the shape. This can be done in April or May, just before trees start to grow.

The Common or English name of each variety is placed first in black faced, conspicuous type. The botanical name of variety follows in parenthesis.

Deciduous Trees

Brief Suggestions for the Selection of Trees for Various Uses

Street or Avenue Trees. American Elm, Sugar, Soft and Norway Maples, White Ash, American Linden or Basswood, Catalpa, Horse Chestnut and Box Elder.

Lawn and Park Trees. White and Cut-Leaf Birch, Schwedler's Purple Maple, Norway Maple, Catalpa, Bechtel's Double Flowering Crab, Double Flowering Thorns, American Elm, Camperdown Elm and Tea's Weeping Mulberry.

Trees That Thrive in Moist Locations. American Elm, American Linden, White Ash, Poplars, Willows, and Box Elders.

Ash - Fraxinus

A class of large ornamental trees, adapted to a great variety of soils. Of quite rapid growth and possessing many desirable characters for lawn, street, and park planting.

White Ash (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. Lg. This species is of the greatest value in the prairie states of the Northwest. Although not so tall a grower nor so rapid in growth, it is much hardier 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.

White Ash.

Beech - Fagus

The Beeches are hardy and thrive best in a deep, rich clay soil. Best success will be obtained by planting small specimens and pruning severely at time of transplanting.

American Beech (F. Americana). 40 to 60 feet. One of our finest native trees.

Rivers' Purple-leaf Beech (F. sylvatica Riversi). 30 to 40 feet. The finest of all purple-leaf trees, as the foliage has fine coloring throughout the entire season.

Birch - Betula

American White 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.

Weeping Cut-Leaf Birch (Pendula laciniata). Med. 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 with vigorous growth. It has an erect central trunk, somewhat pyramidal in shape, with graceful, drooping branches and white bark on all the old wood.

Butternut, Walnut - Juglans

This species furnishes us two of our grandest, native, ornamental trees. In congenial soils they are very valuable trees for all kinds of lawn, park or street planting. They have a characteristic foliage not found in any other species and a delightful effect is produced wherever used.

Butternut, White Walnut (Cinerea). Lg. Very much resembles the Black Walnut. It is a moisture loving tree and succeeds best on low rich soils. A broad, open top tree, with light green, compound foliage and gray bark.

Black Walnut (Nigra). Lg. Like the Butternut, it prefers a damp soil. It, however, is a satisfactory tree on lighter soils though slower in growth. It makes a uniform street tree and is also a very fine shade tree.

Weeping Cut-Leaf Birch.

DECIDUOUS TREES—Continued.

Catalpa

Catalpa Speciosa. Western. Med. to Lg. A handsome, large-foliaged tree; fine for lawn or landscape planting, and forming a valuable street tree. Its fine racemes of flowers in early summer is a distinguishing feature of it, and its heavy crop of long, pendent "beans" in autumn are unique. Much used of late years for railroad ties, fence-posts, etc. The wood, though soft, is very durable.

Bungei. Globe-headed Catalpa. A rapid-growing tree with a globe-headed mass of large, heart-shaped, deep green leaves lying like shingles on a roof, always making a symmetrical head; excellent for formal effects; not hardy in Wisconsin.

Crab, Flowering - Pyrus

Bechtel's (Angustifolia). A low, bushy tree, rarely over 20 feet in height. It is the most beautiful of all the fine varieties of Flowering Crabs. At a distance, the tree seems to be covered with dainty little roses of a delicate pink color. Blooms when quite young and is very fragrant. Makes one of the handsomest lawn decorations in our list, and planted in front of Evergreens, forms an interesting picture.

Cherry - Cerasus

No garden is complete without these beautiful trees. Besides their ornamental qualities they have the added advantage of attracting birds which feed upon the fruits. Cherries thrive in any fertile soil.

Double Pink Flowering Cherry (Avium var. rosea plena). Med. Similar to var. alba plena, but with pink flowers.

Double White Flowering Cherry (Avium var. alba plena). Med. A very fine, free blooming variety, with double flowers in May. The individual flowers resemble miniature white roses.

Blossoms of Bechtel's Flowering Crab.

American Elm.

Elm - Ulmus

Stately trees combining grace of habit and beauty of outline. They are hardy and of extremely rapid growth when planted in moist loam. No lawn or landscape is complete without them.

American White Elm (Americana). Lg. One of the 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.

Camperdown Weeping Elm. When grafted they grow from 6 to 8 feet high; forms a large, handsome head; branches often extend horizontally several feet before drooping. A fine variety.

Horse Chestnut - Aesculus

American Horse Chestnut or Buckeye (Glabra). A handsome, medium sized tree, with spreading branches and peculiar five-parted foliage. In spring it bears fine, upright clusters of greenish white flowers, which are followed by large, odd, prickly seed-pods inclosing the well known buck-eyes.

European Horse Chestnut (Hippocastanum). A tall, massive, stately tree, with an immense, round crown and strong, stiff branches clothed with large, five-parted foliage casting the densest shade of any deciduous tree. In the spring it is one of the most beautiful sights when it displays its innumerable, showy, erect clusters of spotted white flowers.

Honey Locust - Gleditschia

Honey or Sweet Locust (Triacanthos). Med. A rapid-growing tree; delicate foliage of a beautiful, fresh, lively green, and strong thorns; makes an exceedingly handsome, impenetrable and valuable hedge.

DECIDUOUS TREES—Continued.

Linden, Basswood - Tilia

American Linden, Basswood (*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 (*Platyphyllos*). Broad-leaved European Linden. Lg. It forms a broad topped tree, with large, handsome foliage. It flowers early in the season. A desirable tree for either avenue or lawn planting. Not hardy in Northern Wisconsin.

Maple - Acer

Box Elder Ash-Leaved Maple (*Negundo*). Med. A rapid growing variety, with handsome light green foliage and spreading head. Very hardy, and succeeds in many sections where other varieties do not thrive.

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

Schwedler's Purple Maple. 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.

Soft or Silver Maple (*Saccharinum*). Lg. A well known ornamental tree, with wide spreading, slender branches. Has been much used as a street tree. It is valued for windbreaks on account of its quick, upright growth.

Sugar, Hard or Rock Maple (*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. It makes a splendid and uniform street tree, and is adapted to nearly all kinds of soil.

American Linden.

**Kentucky Coffee Tree -
Gymnocladus**

Kentucky Coffee Tree (*Canadensis*). Med. An irregular growing tree of medium size, rough bark and very small branches. Foliage of bluish green color.

Larch - Larix

Trees of pyramidal outline of great hardiness. They grow in almost any kind of soil, but prefer a moist well-drained situation.

European Larch (*L. Europea*). 40 to 50 feet. A lofty, rapid-growing pyramidal tree, with small drooping branches and delicate feathery foliage. Valuable for timber.

Norway Maple.

Weir's Cut-Leaved Silver Maple.

DECIDUOUS TREES—Continued.

Wier's Cut-Leaved Silver Maple (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

European Mountain Ash (Aucuparia). Med. A round headed tree, twenty to forty feet high and occasionally more. It is ornamental all through 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 a very handsome lawn tree, of dense, pyramidal form. The leaves are different from the other Mountain Ashes.

Mulberry - Morus

Hardy ornamental trees, thriving in almost any soil. The sweet, fleshy fruits are a great attraction to birds, and on this account they are planted extensively.

Russian Mulberry (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 silkworms.

Weeping Russian Mulberry (Tartarica Pendula). One of the most graceful of weeping trees. Forms a perfect umbrella-shaped head, with long, slender branches, drooping to the ground, parallel to the stem. It has beautiful foliage, rather small and handsomely cut.

Tea's Weeping Mulberry.

Oak - Quercus

Pin Oak (Palustris). Lg. Peculiarly handsome tree when young; used for avenues. Leaves deep green, turning to red in the fall, finely divided. Drooping branches.

Red Oak (Rubra). Lg. A broad tree, rich foliage which turns to a bronzy red in the fall.

Poplar - Aspen, Populus

Bolleana. Pyramidal Silver Poplar. Of recent introduction. A very compact, upright grower, resembling the Lombardy Poplar. Leaves glossy green above and silvery beneath, with a trunk of a bluish hue. Med.

Carolina 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 possesses straightness and durability which most of the Poplars lack.

Canadian Poplar (Canadensis). Lg. 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.

Lombardy (Fastigiata). A tall, picturesque, spire-like tree, fine for formal planting, such as along avenue or marking the boundary of grounds.

Norway Poplar (Called by some Sudden Saw Log). Very similar to the Carolina Poplar. We consider it a little more stocky grower than the above, and equally as good in every way.

European Mountain Ash.

Silver or Soft Maple.

Sycamore, Plane Tree - Platanus

Rapid-growing hardy trees of great adaptability, but thriving best in moist loam. The American species may be recognized by the single "buttons" drooping on their long stalks.

American Sycamore (*Occidentalis*). Lg. A large, rapid growing tree, suitable for street planting. Attains a height of 40 to 50 feet.

Tree of Heaven - Ailanthus

Peculiar tropical-looking tree, with long sprays of odd pinnate foliage, much like Sumac. Fine for street planting, as it endures the city dust and smoke remarkably well. Grows very tall and spreading. Not extremely hardy.

Carolina Poplar.

DECIDUOUS TREES—Continued.

Thorn - Crataegus

The Thorns are among the most beautiful flowering trees. They are generally dense, low growers, occupying comparatively little space and well adapted to beautify small grounds. The foliage is varied and attractive, flowers very showy and often highly perfumed. The fruit is very effective and ornamental in autumn.

Double White (*Alba fl. pl.*). Has small double white flowers.

Paul's Double Scarlet (*Paulii*). Flowers larger, deep carmine scarlet. Superior to any other variety.

Willow - Salix

Golden Willow (*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 symmetrical form. One of its strongest ornamental features is the bright, clear, golden yellow bark, which offers a pleasing contrast wherever it is used. Valuable for hedge and windbreak purposes.

Laurel Leaf or Bay Leaf Willow. 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.

Wisconsin Weeping Willow (*Babylonica*). Lg. 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 though not so pronounced as the Kilmarnock type.

Wisconsin Weeping Willow.

Beautifying the Home Grounds

Endeavor to picture in your mind the appearance of the work when completed, and also what the result will be in after years when the trees and plants have attained their growth.

The first step will be to locate your drives and walks, these should be conveniently placed and as few and short as possible; a slight curve however, is more graceful and pleasing to the eye than a straight line. In grading be sure to have at least a foot of good soil on top. Try to avoid steep terraces; slopes of easy natural curves will keep in order much longer, seldom requiring repair and are easier to care for. If a steep bank is unavoidable, it may be planted with suitable shrubbery in groups.

In placing trees and shrubs, preserve the desirable views, screening the objectionable. Trees with bold outlines, planted at a distance will give character, while masses of the smaller growing and more select varieties will add charm to the foreground. Procure such as are best adapted to the location, are easily taken care of and that will produce a variety of flowers and foliage to make your grounds attractive throughout the year.

In arranging plantings, leave as much open lawn as possible. On the margins plant in masses and beds with large bays and projections to which later new acquisitions may be added. Consider the size of the plants at maturity, placing the largest in the rear and those of dwarf habit in the foreground. Give each room for full development. If immediate effect is desired, the

Before Planting.

planting can be closely made by placing first what is to remain permanently, allowing ample room for development, then filling between these with plants which are later to be removed.

We offer a wide assortment of such ornamental stock designed to meet the requirements of our patrons. Many of our trees are native—and therefore we know they will thrive better than many imported and unadapted species.

Deciduous Trees

There is an ornamental deciduous tree for almost every purpose—whether for shade, for hiding objectionable sights, for beauty of flower, or utility. Knowing them as we do, there is not one but has its faults, and therefore careful choosing of your trees should follow. We commend the use of shade trees not only as specimens but in groups thickly planted and bordered with shrubs. We carry a very complete line of adaptable shade trees, properly grown with heavy roots to insure vigor.

Evergreens

The Evergreens are indispensable in some features of ornamental gardening. They are especially valuable for screens and windbreaks, for a background against which to group trees with beautifully colored leaves or branches, and for winter decoration. In fact in the Northern states the Pines, Spruces and other native Evergreens are so well adapted to the climate and soil that they are quite as important in all branches of ornamental planting as the deciduous trees and shrubs.

Choice Evergreens should be dug and shipped with a ball of earth as an extra precaution that plants will arrive in good condition.

Two Years After Planting.

Shelter Belt Planting

There are many places throughout the Northwest where belt planting of trees is desirable. It will afford protection to the orchard, farm yard, and other features about the premises. Such a planting will also furnish fire wood—a point in many instances worthy of consideration. From reports of various Horticultural and Agricultural Societies and Experiment Stations, it is the consensus of opinion that Shelter Belt Planting is desirable and profitable. In the following paragraphs we outline briefly.

The Orchard and Garden. Must have protection from the hot, dry winds of summer and the cold winds of winter on account of nearly all fruit stock being surface feeding—that is, the root system does not penetrate deep down like the oak and many other native trees, hence fruit trees and plants are quickly affected by sudden changes in the conditions of the top soil. For these reasons the home garden grounds must be maintained at as normal degrees as possible, then maximum results will be obtained in producing annual crops with the least amount of failures.

The Farm Yard. Protection from wind is an absolute necessity for live stock. This fact has been often demonstrated by the actual experience of many farmers throughout the Northwest. All stock growers agree that to allow horses, cattle, sheep, or swine to run for exercise in yards exposed to cold winds, is the most disastrous thing that can be done. It has been proved time and

time again that milch cows will increase in their daily milking; hogs can be more easily fattened; if the yards and runways are protected.

Cultivation. Cultivation of the grove should be commenced shortly after planting, and be repeated often enough to keep the top three inches of soil loose, so as to form a dust blanket to retard evaporation during dry weather. The soil should never be allowed to become baked hard after a rain, but the crust should be broken up with a cultivator as soon after a rain as is possible.

Protection to Buildings may be furnished by a few rows or a grove of trees. It is generally best to locate the buildings in a grove, or grow one up around them, so that protection may be afforded from every quarter to the best advantage. The garden should also be included in the grove or shelter belt about the buildings.

Forest Trees

There are still many places on the Western prairies where a shelter grove and timber lot are needed to make a complete farm home. With land still plentiful it is doubtful if two or more acres can be put to better use than providing a shelter for the home and all the stock and farm buildings, in a climate where winds below the freezing point are blowing nearly half the year. The trimmings from a good-sized grove will furnish a good supply of the best summer wood, poles, posts, and timber for various uses that will always be convenient to have at hand.

Such groves should be planted about four feet apart each way so as to encourage a clean straight growth and the sooner shade so as to require no cultivation. An acre thus planted requires 2,720 trees.

For dry soils and on the Western prairies plant a good proportion of **Ash**. It is not only the hardiest but makes the most useful timber of all

our forest trees. The **Box Elder** is good to mix with more valuable trees, as it grows fast while young, shades the ground quickly and forces the slower trees to make clean straight stems. The **American Elm** is almost equal in hardiness but not of so much use for timber. Valuable to mix with other trees. In moist soils the **Soft Maple** is a good tree, especially valuable for firewood. But after all there is no tree that equals the willow for shelter and fuel. On the dry Western prairies the **Laurel Leafed Willow** is the most popular. Its broad thick shiny leaves seem to be especially fitted to endure dry air. The **Russian Golden Willow** is also very popular. It branches profusely, making a denser shelter than any other tree. The Northern Pacific Railroad is using it to take the place of its expensive and troublesome snow fences. But the **Norway Poplar** is the tree that leads them all in rapid upward growth and saw log qualities.

An Attractive Arrangement of Evergreens.

Evergreens

The Evergreens are indispensable in some features of ornamental gardening. They are especially valuable for screens and windbreaks, for a background against which to group trees with beautifully colored leaves or branches, and for winter decoration. In fact in the Northern States the Pines, Spruces and other native Evergreens are so well adapted to the climate and soil, that they are quite as important in all branches of ornamental planting as deciduous trees and shrubs.

Arbor-vitae - *Thuja*

Peabody's Golden Arbor-vitae (*Occidentalis lutea*). A bright golden yellow form of the Arbor-vitae, of dense habit, and with short branches, growing in pyramidal shape. It is of extra-hardy constitution, and adds a pleasing touch of brightness to the rest. It retains its color well all through the winter, and at all times is very effective, forming a brilliant contrast to the others.

Siberian Arbor-vitae (*Wareana*). Med. A very desirable type of the Arbor-vitae. Forms a dense, rather conical body of very symmetrical habit and pretty either in groups or singly. The foliage is stiff and heavy and of a deep rich green color.

Common American Arbor-vitae (*Occidentalis*). Med. Also erroneously called White Cedar. The best known and most valuable of this genus. In cultivation this species is best known from its widespread 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 desired height or shape.

Pyramidal Arbor-vitae (*Pyramidalis*). Forms a tall, slender column of dark green, 20 to 40 feet high, similar to the Irish Yews. A very valuable variety for many kinds of ornamental planting and a rich and attractive variety wherever columnar effects are desired. Very desirable for single specimen planting on the lawn or elsewhere. It keeps its fine color well all season. Very hardy.

Hovey's Arbor-vitae. A distinct variety of globular and dwarf habit, that has fan-shaped leaves of bright green. Fine and hardy.

Globe Arbor-vitae (*Globosa*). Sm. Of dense, dwarf habit, globular in outline; color a pretty light green; requires no shearing and always in good form.

Fir - *Abies*

Balsam Fir (*Balsamea*). Lg. A handsome, symmetrical tree, especially when young, with beautiful leaves, dark green above and lighter beneath. Will grow on wet ground as well as in better soil.

Concolor (White Silver). An elegant, picturesque Colorado species; long, leathery leaves with glaucous tinge when young, becoming pale green with age. Branches arranged in horizontal whorls. One of the brightest and best evergreens for the lawn.

Hemlock - *Tsuga*

Hemlock Spruce. A beautiful and graceful native tree with drooping branches and dark delicate foliage of green. It makes a fine lawn tree or ornamental hedge.

Pine - *Pinus*

Austrian Pine or Black Pine (*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 specimens or mass planting.

Mugho Pine (*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 medium length. Valuable for planting on rocky ground and hillsides.

Scotch Pine (*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 evergreen group.

White Pine (*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 ends of the branches.

No. 1—Mugho Pine. No. 2—Norway Spruce. No. 3—Golden Arbor-vitae. No. 4—Concolor Fir. No. 5—Bechtel's Flowering Crab. No. 6—Spirea Van Houttei. No. 7—Crimson Rambler.

Spruce - Picea

Colorado Blue Spruce. Med. to Lg. One of the most beautiful and hardy of all the Spruces; in

form and habit similar to the White Spruce; foliage a rich light bluish-green.

Koster's Blue (Pungens Kosteriana). The very best of the Blue Spruces. Foliage is silvery blue, densely crowded on the many branches. Our stock of this beautiful and popular evergreen has been grown with great care from stock which we know is the genuine Koster's and can guarantee its true blue color and character. In height it is the same as the Colorado Blue.

Norway Spruce (Excelsa). Lg. This is the most popular of the foreign Spruces and has been extensively planted, especially in the Northern States. It is of rapid growth, and is a handsome tree with graceful habit and dark green foliage.

White Spruce (Alba). Lg. A well known native tree and one of the most magnificent ornamental evergreens for all purposes. It forms a loosely, symmetrical tree with rather pendent branches toward the base. As a specimen tree on good soil, it is a shapely feature for any planting.

Juniper - Juniperus

Conifers of extremely easy growth, hardy, and long-lived. Effective in landscape plantings as the variation in form and color tints are exceedingly pleasing when properly grouped.

Red Cedar (Virginiana). Lg. Probably the best known species of this whole family. The Red Cedar is indigenous throughout Wisconsin and the entire Northwest. It does well in dry and exposed locations, and is admirably adapted to windbreak planting, being especially valuable in mixed plantings.

Savin Juniper (Sabina). Sm. Of dwarf, spreading growth. Hardy and thrives well on poor soil; a favorite for rockwork.

Schottii Juniper. A dense pyramidal form of low growth, almost dwarfish, the foliage being bright green and light.

Blue Spruce.

SPIREA VAN HOUTTEI

Deciduous Flowering Shrubs

The permanent value and beauty of Deciduous Shrubs was never better understood and appreciated than at the present time. The charm and grace they lend to the home grounds is invaluable, and, if judicious selection is made, it is possible to have a continuous succession of bloom from early in April, when the Forsythia displays its brilliant golden flowers to welcome the returning birds, to the days when the frost again nips the flowers of the very latest to bloom. In our descriptions we endeavor to indicate the height of the bush at maturity, the time of its blooming, in this latitude, and the color of its flowers.

Almond - *Amygdalus*

Double Red-Flowered. 3 to 4 ft. A beautiful small shrub, bearing an abundance of small double rose-like flowers in May, closely set upon twigs before the leaves appear.

Double White-Flowered. 3 to 4 ft. Produces beautiful double white flowers in May.

Berberis - *Barberry*

Thunbergi Barberry (Japanese). 2 to 3 ft. Of low, spreading growth, forming a dense bush. The twiggy branches are covered with small flowers succeeded by brilliant scarlet berries. The foliage takes a splendid autumn coloring of gold and scarlet. This variety is immune from disease and does not carry rust to wheat.

Calycanthus - *Sweet-Scented Shrub*

The *Calycanthus* is one of the most desirable shrubs. The wood is fragrant, foliage rich, flowers of a rare chocolate color, having a peculiar, agreeable odor. They blossom in June and at intervals afterward. A native species, growing 6 to 8 feet high, with double purple, very fragrant flowers.

Thunberg's Barberry.

DECIDUOUS SHRUBS—Continued.

Deutzia

One of the most desirable shrubs to plant as individual specimens, or for grouping. Their hardiness, luxuriant foliage and profusion of attractive flowers render them deservedly among the most popular of flowering shrubs. The flowers are produced in June, in racemes four to six inches long. They are extremely floriferous and ornamental, and make possible many striking effects in garden or border plantations. Of easy culture, thriving in almost any well-drained soil.

Lemoinei. The branches are entirely covered with erect panicles of large, snow-white flowers, quite distinct from all other Deutzias, and one of the best varieties. Hardy.

Eleagnus - Oleaster

Russian Olive (Angustifolia). A very hardy and handsome species that in some sections forms a small tree, 12 to 15 feet high. The leaves are particularly handsome, willow-like, and a rich, silvery white. The flowers are small, golden yellow and very fragrant, followed by yellow fruits, which are covered with silvery scales. Blooms in June.

Forsythia - Golden Bell

The Forsythias are among the very earliest shrubs to bloom, and before the snow is completely gone they give signs of awakening life. They are strong, vigorous shrubs with many branches, which become clothed with beautiful, bright golden yellow flowers before the leaves appear.

Fortune's (Forsythia Fortunei). A handsome form, with slightly drooping branches. Flowers golden yellow, often with twisted petals. A grand shrub, often 5 to 7 feet tall.

Intermedia. Flowers bright golden yellow; foliage glossy green; resembles the Viridissima, but hardier; a valuable variety.

Suspensa. Long, slender, curving branches. May well be called Weeping Forsythia.

Fortune's Forsythia.

Deutzia
Lemoinei.**Cydonia (Pyrus Japonica) - Quince**

As single shrubs on the lawn they are very attractive, and for the edges of borders or groups of trees they are specially adapted.

Japan Quince. 5 to 8 ft. Has bright scarlet crimson flowers in great profusion in the early spring.

Cornus - Dogwood

Hardy and vigorous shrubs, thriving best in moist, fertile soils. In addition to the showy flowers and fruits, which characterize most of the species, they are very attractive in winter on account of the brilliant color of the bark of the young shoots and twigs.

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

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

Variegated-Leaved (Elegantissima var.). 4 to 5 ft. This variety of the well known Red Dogwood has silver margined leaves, which render it a very showy shrub. We consider it to be an addition of great merit.

Clethra

White Alder or Sweet Pepper Bush (Alnifolia). 4 to 5 ft. July and August. A dense growing shrub with dark green, dentate foliage and showy, upright spikes of creamy white, very fragrant flowers. A choice plant for borders and groups. Very desirable on account of its late blooming season.

Hydrangea Arborescens.

DECIDUOUS SHRUBS—Continued.

Fringe - Rhus

Purple Fringe (*Rhus Cotinus*). A unique and conspicuous spreading shrub or small tree, 10 to 12 feet high, with large leaves. These are overhung in mid-summer by cloud-like masses of very light, mist-like flowers, having the appearance of smoke at a little distance.

Hibiscus - Althea or Rose of Sharon

Althea. One of the best known shrubs, with handsome plain and variegated foliage and bearing large single or double flowers in August and September when the shrubbery border is apt to be bare of other flowers. They are very hardy, easily cultivated and will bloom until their growth is cut off by frost; they are fine for flowering

hedges, and will stand considerable pruning. This should be given in winter. They attain a height of from six to ten feet. We can supply it in White, Pink, Purple or Red. Not very hardy in Wisconsin.

Hydrangea

Grand, free-flowering shrubs with large clusters or panicles of showy flowers. They are admirably adapted for border planting, either as specimen plants or in masses. A moist, fertile soil, with full or partial exposure to sun, is best adapted to their requirements.

Bush Hydrangea (*Paniculata Grandiflora*). 5 to 6 ft. This is one of the most valuable hardy shrubs. It is perfectly hardy in all parts of the country. The flowers are white, borne in immense panicles nearly a foot in length. It commences flowering in July and continues until November. The plant should be cut back every spring at least one-half of last season's growth, as the flowers are borne on new wood and are much finer when the plant is treated this way. An excellent shrub for cemetery planting.

Arborescens (*Hills of Snow*). 4 to 6 ft. This hardy American shrub is the very finest addition to this class of plants found in many a year. The blooms are of the very largest size, of pure snow white color, and the foliage is finely finished. One of its most valuable characteristics is its coming into bloom just after the passing of all the early spring shrubs, while its long season of bloom, from early June through August, renders it doubly valuable. Hardy.

Tree Hydrangea (*Paniculata Grandiflora*). 6 to 8 ft. In tree form. Beautiful as a shrub, they are grandly beautiful as a tree, growing in loveliness as they acquire age and size.

Hydrangea Paniculata Grandiflora.

DECIDUOUS SHRUBS—Continued.

Lonicera - Bush Honeysuckle

The following species and varieties are of erect, shrubby habit. Valuable for their handsome flowers and showy fruit. The climbing sorts will be found under the head of Climbing Shrubs.

Morrowi. 4 to 6 ft. A bush of spreading habit. The yellowish white flowers are followed by red fruit, which remains on the plant a long time and is very ornamental.

Red Tartarian. 8 to 12 ft. A well known old-fashioned sort which blooms in May. It has slender and upright branches, with small bright pink flowers followed by red or orange yellow berries.

White Tartarian. 8 to 12 ft. Same as the Red Tartarian, except in its beautiful white flowers, for reason of which it is fine for planting with other varieties for contrast.

Lonicera Morrowi—Bush Honeysuckle.

Ligustrum - Privet

The Privets are best known for their use as hedge plants, but if allowed to grow to full height, they bear beautiful clusters of white flowers very much like a small lilac in character. All the varieties stand pruning to any extent and can be cut into any desired shape or form. In severe winters the tops kill back in this latitude, but soon recover.

Amoor (North). A fine shrub of upright growth. Its pure white flowers appear in June and are followed by bluish black seeds.

Regel's. A fine, hardy variety, desirable in growing singly as specimen or in mass planting. This is one of the berry varieties.

Amoor River Privet (North).

LaCross, Wis., November 5th.

McKay Nursery Company,
Madison, Wis.

Gentlemen:—We are having some nice weather and I followed your advice and planted yesterday. The last time I wrote you we had a snow storm here.

The plants you sent me looked very good to me. The finest I ever saw. Enclosed find my check for \$92.25.

Yours truly,

JOSEPH HAMBUECHEN.

DECIDUOUS SHRUBS—Continued.

Lilacs

Hardy free-flowering shrubs with showy fragrant flowers in spring and early summer. They are among the most popular and beautiful of flowering plants, and thrive in almost any fertile soil with moderate moisture. A careful selection will offer a greatly extended season of blooming.

Common Purple Lilac (*Vulgaris*). 8 to 10 ft. 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 Lilacs as a class, one of our most popular modern shrubs.

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

Persian Lilac (*Persica*). 5 to 6 ft. May and June. A distinct species of rather smaller growth than *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.

Rothomagensis (*Rouen Lilac*). 5 ft. A variety similar in habit and growth to the *Persica*, with reddish purple flowers.

Choice named varieties which grow 4 to 8 feet in height:

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

Josikaea (*Hungarian Lilac*). Late in May. A distinct type, with dark green leaves. The deep purple buds, arranged in loose panicles, open into light violet-colored flowers. 2 to 3 feet.

Purple Lilac.

Lilac Villosa.

Lemoinei. A choice variety of the Lilac, producing long racemes of double purple flowers, lasting longer than the single sorts. A valuable acquisition.

Mad. Abel Chatenay. A very desirable variety, with milk-white, double flowers; panicles of medium size; very compact; fine for cut-flowers.

Marie Lefraye. Large panicles of white flowers; the finest white.

President Grevy. Large, beautiful blue flower panicles. Individual flowers very double and large. One of the best.

Villosa. A species from Japan. Large branching panicles; flowers light purple in bud, white when open; fragrant. Especially valuable, as its flowers appear two weeks after those of other Lilacs.

DECIDUOUS SHRUBS—Continued.

Philadelphus - Syringa

Also known as Mock Orange. Of vigorous habit, very hardy, with large, handsome foliage and beautiful white flowers produced in great profusion. They merit a place in every collection of shrubbery.

Syringa Coronarius (Sweet Syringa). 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 most delightful fragrance. Probably the most fragrant of the class.

Syringa aureus (Golden Syringa). 3 to 5 ft. A compact shrub with bright yellow foliage which retains its color well throughout the season. Very effective in grouping as a contrast to the darker foliage of others.

Lemoine. A small shrub rarely attaining a height of more than four feet. Branches slender and bearing in June a profusion of flowers closely resembling the orange blossoms in size, form and fragrance, which is very desirable.

Syringa grandiflorus (Large-Flowered Syringa). 8 to 12 ft. June. Very showy, large flowers, usually borne in threes. Scentless. It is of rapid growth with reddish bark.

Prunus - Flowering Plum

Purple-Leaved Plum (Pissardi). 8 to 10 ft. A small tree or shrub. The foliage and young shoots are of a rich reddish purple, which they retain throughout the season. Not perfectly hardy in this latitude.

Double-Flowering Plum (Triloba). 5 to 8 ft. A large shrub or small tree; the branches are covered early in the season, before leaves appear, with small, double, pink flowers. Very desirable.

Rhamnus - Buckthorn

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

Rhodotypos - White Kerria

White Kerria. 3 to 6 ft. Bears an abundance of white flowers in May; foliage attractive; bush slender grower; hardy.

Ribes - Flowering Currant

Alpinum (European Mountain Currant). 3 ft. Of dwarf, compact habit, growing very symmetrical, with fragrant yellow flowers.

Aureum (Yellow-Flowered Currant). A very showy, yellow-flowering shrub, which blooms in great profusion soon after the Forsythias. The flowers are followed by black fruit. The plant attains a height of 5 to 8 feet.

Rhus - Sumac

Smooth Sumac (Glabra). 8 ft. Large-growing shrub, with smooth bark. Very effective in autumn with its crimson seeds and foliage.

Cut-Leaf Sumac (Laciniata). 6 to 8 ft. An ornamental variety similar to glabra, but has its leaves deeply cut, giving it a fern-like appearance.

Staghorn Sumac (Typhina). 8 to 12 ft. A dense, velvety, hairy species. In fall it has brilliant foliage and scarlet heads of fruit. Thrives in poor, rocky soil.

Philadelphus—Mock Orange.

Sambucus - Elder

Common Elder (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 (Laciniata). 5 to 9 ft. A valuable variety with elegantly divided leaves. Of drooping habit and one of the handsomest shrubs in cultivation.

Golden Elder (Aurea). Bright golden yellow leaves, the color being distinct and permanent all summer. Of vigorous, spreading habit. One of the best golden foliaged shrubs.

Spirea

The Spireas are all elegant, low shrubs, of the easiest culture, and their blooming extends over a period of three months.

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.

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

Anthony Waterer (Bumalda). This variety has largely superseded its parent. It produces flowers of a bright crimson and blooms so freely that it may be kept in flower throughout the summer till late fall by trimming out dead bloom.

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

Froebelli. Has a flat pink blossom, very similar to Anthony Waterer. It resembles this variety in every respect except that it is a little stronger grower. Perfectly hardy and deserves extensive planting.

SPIREA—Continued.

Opulifolia var. aurea (Golden Spirea or Golden-Leaved Nine Bark). 5 to 8 ft. 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.

Thunbergii (Thunberg's Spirea). 3 to 4 ft. May. One of the finest spring blooming small shrubs. The flowers are pure white and are borne along the entire length of the branches.

Van Houttei. A beautiful shrub, growing 4 to 6 feet high. Blossoms in clusters about 1½ to 2 inches in diameter; flowers white and borne in great profusion, frequently covering the plant when in bloom. It is one of the finest shrubs we have for cemetery use, and also makes a beautiful ornamental hedge. It is perfectly hardy as far North as northern Minnesota.

Symphoricarpos - Snowberry

Snowberry (Racemosus). 3 to 4 ft. Inconspicuous rose colored flowers in June and July; followed by large, clustered, milk white fruits which remain far into the winter.

Indian Currant (Vulgaris). 3 to 4 ft. Similar to the Snowberry except that its fruits are red, and that the smaller red berries cluster in thick ropes about the weighted-down stems.

Tamarix

Amurense (Asiatic Tamarisk). New. The hardiest of its species; found in Asia. Other varieties are often tender in this locality. The loose, rose-colored flowers are borne along its branches; the foliage is light and feathery. If cut back each spring before the growth starts, the bush will be more graceful during the season. May be planted on moist grounds as well as dry. Grows 5 to 6 ft.

Hispida. A new variety of recent introduction; perfectly hardy, coming through our severe winter of 1911-12 without injury. Similar to Amurense, but the leaves are more compact and have a bluish tint and has an immense head of flowers of the brightest carmine-pink. This shrub is a great acquisition to the Tamarisk family.

Viburnum - Snowball

This is a showy group of shrubs that usually grow from 5 to 10 feet high, bloom lavishly in spring, bear pretty fruits and color to red or purple in fall.

High-Bush Cranberry (Opulus). The well known variety in old gardens. Grows 8 to 10

Spirea Anthony Waterer.

feet high, bearing its balls of flowers in great profusion in May, followed by scarlet fruits.

Common Snowball (Sterilis). 4 to 5 ft. A grand hardy shrub. The flowers appear in numerous compact balls in spring. Well known and justly popular.

Dentatum. 6 ft. A bushy, upright-growing shrub of large size, growing to perfection in all sections of the North. The leaves are heart-shaped, bright green in summer, changing later to rich purple and red. The creamy white, handsome flowers, borne in late spring in large, flat clusters are followed by blue-black berries.

Japan Snowball (Plicatum). 3 to 4 ft. A handsome shrub with branches at right angles to the stem, and beautifully creased foliage. Its white flowers are borne the entire length of the branches, creating a most ornamental effect.

Lantana (Wayfaring Tree). 5 to 6 ft. A tall shrub with white flowers in large clusters in May, succeeded by bright red berries changing to black later.

Weigela - Diervilla

Candida. 6 ft. This is the very best of all the white flowering Weigelas. A strong, upright, erect grower; flowers pure white and produced in great profusion in June and continues to bloom through the summer.

Eva Rathke. 5 to 6 ft. A charming new Weigela, flower brilliant crimson; a beautiful, distinct, clear shade, producing two and sometimes three crops of blossoms in a season.

Rosea (Rose Colored). 5 to 6 ft. A hardy and beautiful shrub, bearing in May a profusion of rose colored flowers. Introduced from China, and justly considered one of the finest shrubs we have.

Variegata. An attractive, dwarf-growing shrub, with handsomely variegated leaves and flowers of a very pale pink, almost white. 2 to 3 feet.

Common Snowball.

Ulrich Brunner.

Roses

The Rose, "The Queen of Flowers," is justly one of the most popular in cultivation, and none gives better satisfaction to the lover of beautiful flowers when properly treated. To obtain richness and luxuriance of foliage, and well developed flowers, it must receive good cultivation. With good treatment it will yield a varied, profuse and beautiful display of flowers from June to November.

Our Roses are strong dormant plants grown outdoors, well rooted and in every way first-class. They have in some cases already bloomed before being sent out and we believe will give satisfaction and permanent success.

They thrive best in a good, well-drained clay soil where they can have plenty of sunlight. Make the ground rich with well-rotted manure, and in spring severely prune all varieties except climbers and Persian Yellow. Cover in fall with some coarse dry materials.

Pruning is necessary to maintain a good shape, and to secure a good supply of young wood. This should be done in the spring; the latter part of March is the best time. This is done by cutting off the previous year's growth to within three or four buds. The remaining buds will then throw out vigorous branches, and in due season produce a splendid bloom. This mode of pruning, however, is not applicable to climbing roses until the desired surface or space is covered.

Insects—Guaranteed Remedies

Roses which are strong and vigorous are not likely to be attacked by insects, or, if attacked, are not easily injured. It is highly important, therefore, to keep your plants healthy and in good growing condition by liberal manuring and thorough cultivation. When insects appear, apply the proper remedies promptly and vigorously, and in bad attacks stir the ground deeply with the hoe and rake every day. A little perseverance to resist the present attack is all that is needed; next year you may not be troubled with insects at all. We find that a strong stream of water from a hose applied once a day, either morning or night, will keep our roses free from insects. Where this is impossible, we would suggest the following remedies:

Boil for ten minutes four ounces of quassia chips in a gallon of soft water. Strain off the chips and add four ounces of whale-oil soap, which should be dissolved in it as it cools. Stir well before using. Apply with a clean painter's brush of moderate or small size, brushing every leaf and shoot that is infested. After fifteen or twenty minutes the plants should be washed or syringed with pure water. For mildew, sprinkle lightly with flour of sulphur.

ROSES—Continued.

Rose Caterpillar appears in May, or about the time the leaves have pushed forth. It can be readily detected, as it glues a leaf or two together to form its shelter. The bushes should be gone over and the glued leaves pinched between the finger and thumb. This is the only effective remedy.

Saw Fly, larva, and other insects later than the caterpillar, may be prevented by an occasional syringing, vigorously applied. When they have appeared a sprinkling of powdered white hellebore over the plants will often destroy and disperse them. The plants should be well moistened before applying the hellebore, so that it will remain.

The Red Spider seldom attacks plants in the open air, but confines itself to plants under glass. It may be kept off by daily syringing the plants with water. When plants are once infested with this insect, the fumes of sulphur will alone destroy it. This causes the foliage to drop off, but it is the best remedy.

Mildew is best cured by sulphur and soot. One of these should be applied the moment the disease appears. It is a good plan to previously sprinkle the plants with water, so that the substance applied will adhere.

The Rose Bug and other kindred pests are most effectually vanquished by a kerosene emulsion, made as follows: Dissolve one-quarter pound hard soap in two quarts of boiling water, then add one pint of kerosene oil, and stir violently for from three to five minutes, until the ingredients are thoroughly mixed; then dilute to twice its bulk with water, and apply with a spraying syringe, or sprinkle it on the plants with a small whisk broom, and repeat as often as necessary.

La France.

Hybrid Perpetuals

American Beauty. An everblooming hybrid perpetual. Deep, rich rose flowers, very large, of beautiful form, and very double. The fragrance is delightful, resembling La France or the old-fashioned Damask.

Anna de Diesbach. Very large and fragrant flowers of a rich carmine color. A notable hardy and superior garden rose.

Alfred Colomb. Dark red. Flowers large, of fine, globular form; a brilliant carmine-crimson. Raised from Jacqueminot. Extremely fragrant flowers, and in every way a superb rose.

Coquette des Alps. Hardy, white, slightly tinged with rose; free blooming; medium in size; dainty and pleasing.

Clio. A rose of perfect form and finish, with broad, thick petals, high, full center, beautiful form, pointed flower. The color is a delicate satiny blush with slightly deeper center.

Earl of Dufferin. Rich dark crimson, shading to maroon; large, full; fragrant; a good grower; one of the best dark roses.

Fisher Holmes. Shaded crimson scarlet.

Frau Karl Druschki. 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.

Alfred Colomb.

Paul Neyron.

Persian Yellow.

ROSES—Continued.

Madame Plantier. Pure white, above medium size, produced in great abundance early in the season. One of the best hardy white roses.

Prince Camille de Rohan. Deep velvety crimson, large, moderately full.

Paul Neyron. The largest variety in cultivation. Deep rose color, very full and double, finely scented, good foliage and free bloomer.

Soleil d'Or (New). This new yellow rose comes very highly recommended. The flower is full, large, globular-shaped, yellow shaded with red. A vigorous grower and free bloomer.

Ulrich Brunner. Flowers brilliant cherry-red, large and full, with exceedingly large, shell-shaped petals. A continuous bloomer.

Climbing Roses

These, for their hardiness and profusion of flowers, recommend themselves to all lovers of the beautiful. They are admirably adapted to cover arbors, walls, and any unsightly objects, and are always ornamental in any situation.

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

Blue Rambler (Veilchenblau). (Violet Blue.) A seedling of the Crimson Rambler. The blossoms are semi-double, of medium size, massed in large numbers. The color on first unfolding is a reddish, purplish pink, turning to amethyst and finally steel blue.

Climbing American Beauty. Color rosy crimson, similar to its pollen parent; flower about four inches in diameter, finely formed on long stems. Blooms very freely in May and June, and occasionally during the summer.

Frau Karl Druschki.

HYBRID PERPETUALS—Continued.

General Jacqueminot. Very fragrant; not very full, but large and effective. One of our best garden roses.

General Washington. Deep crimson; very large and double; open flat.

Gruss an Teplitz. Double red. Very free bloomer. Bears more red roses than any other variety known.

Hermosa. An old favorite that is always in bloom; flowers cupped, daintily formed and very fragrant.

John Hopper. Flowers brilliant rose, large, very regular and full; very sweet.

Jules Margottin. Bright cherry-red; large, full and very fragrant.

La France. Delicate, silvery pink; large and very double; very fragrant and a constant bloomer. Semi-hardy.

Marshall P. Wilder. Bright cherry-red; of good size; very fragrant and perfectly double. Plant is a vigorous grower and continues long in bloom. One of the very best.

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

Magna Charta. A bright clear pink; very sweet; large, fine form; very double; free bloomer.

Margaret Dickson. A very free grower, foliage large and dark. Flower white, with pale flesh center; petals are thick and bell-shaped, quite fragrant; a fine sort.

Madam Gabriel Luizet. Hardy; light, silvery pink; cup-shaped; very large, slightly fragrant; free-blooming.

Marshall P. Wilder.

CLIMBING ROSES—Continued.

Crimson Rambler. Introduced from Japan in 1893, it has been a source of wonder and admiration wherever exhibited. The plant is a very vigorous grower, making shoots from eight to fifteen feet in a season.

Dorothy Perkins. One of the grandest roses yet produced; the beautiful, double, shell pink flowers come in clusters in great profusion, making a wonderful display; foliage finer, smoother and darker than Crimson Rambler.

Excelsa (Red Dorothy Perkins). A radiant, blood-red cluster rose, as free and double as Dorothy Perkins of which it is the red prototype. The clusters are very large.

Flower of Fairfield (Everblooming Crimson Rambler). A sport or offspring of the popular Crimson Rambler. It surpasses any other rose for brilliancy of display. Blooming in the early spring, it continues until well along in the autumn, bearing large, brilliant crimson clusters of flowers with the greatest freedom.

Prairie Queen. Rosy red, flowers large and compact. Very popular.

Seven Sisters. Crimson, changing all shades to white.

White Dorothy Perkins. Of the same habit of growth as the Dorothy Perkins. Where a White Rambler is wanted, we recommend this variety.

Yellow Rambler (Aglaia). The color is a decided yellow; the flowers are very sweet scented; habit of growth is very vigorous, well-established plants often making shoots from eight to ten feet in height in a single season.

Tausendschoen. Introduced from Germany very recently, it has become very popular. It has the same vigorous habit of growth as the Ramblers, attaining ten feet a season. Almost devoid of thorns. The flowers are of a soft pink when first opening changing to a carmine-rose on the reverse as they fully expand.

Wichuraiana, or Memorial Rose (Japanese Trailing Rose). A distinct and valuable variety from Japan; it is a low-trailing species, its stems creeping on the earth almost as closely as the ivy. The flowers are produced in the greatest profusion in clusters on the end of every branch, after the June roses are past. Pure white.

Miscellaneous Roses

Baby Rambler, Pink (Anny Muller). Large clusters of brilliant rose colored flowers in great profusion. A splendid bedding variety. Blooms all season until buds are killed by severe frost.

Baby Rambler, Red (Madame Norbert Levavasseur). A dwarf form of the widely known and popular climbing rose, Crimson Rambler, being hardy, vigorous and perpetual flowering. The flowers are well formed, of a crimson red color, and borne in clusters. For growing in pots in the house, or as a bedding variety, it will be found invaluable. Blooms continuously.

Baby Rambler, White. Flowers are borne in clusters of 50 to 75 individual flowers; foliage glossy and finely cut; vigorous, hardy and free blooming. A fine bedding variety.

Harrison's Yellow. Perfectly hardy; semi-double; blooms early.

Persian Yellow. Flowers double and full; deep golden color; blooms freely in June. Finest hardy yellow rose grown.

Moss Roses

The Moss Roses are favorites with everyone, on account of the beautiful buds, which for bouquets and cut flowers are invaluable.

Dorothy Perkins.

Blanche Moreau. Pure white, large, full and of perfect form; the buds and flowers produced in clusters and freely furnished with a deep green moss. A valuable variety.

Crested Moss. Deep pink buds, surrounded with mossy fringe and crest; very beautiful and fragrant; growth slender.

Glory of Mosses. A moderate grower. Flowers very large, appear to best advantage when full; color pale rose.

Princess Adelaide. A vigorous grower, pale rose and of medium size and good form.

Rosa Rugosa Rubra

This class of roses originated in Japan. They are very hardy, vigorous growers and not troubled with insects. They have thick, leathery, glossy green foliage, and the flowers are followed by bright scarlet seed pods, making them attractive in fall. They are equally desirable as single specimens or hedge plants. Single red flowers.

Hybrid Rosa Rugosa

This valuable class of roses is the result of crossing the Hardy Rosa Rugosa and our common garden roses. This cross has given us varieties that will stand our winter without protection, and give an abundance of bloom during the summer. Most of these also retain the beautiful, dark green Rugosa foliage. We cannot urge too strongly the planting of these roses.

Conrad F. Meyer Rose.

HYBRID RUGOSA ROSES—Continued.

Blanch de Coubert. Very large, pure white, semi-double and borne in clusters; very fragrant. The bush is a strong, sturdy grower, has the Rugosa foliage, and produces an abundance of bloom.

Conrad F. Meyer. Color silvery rose, fragrant, large, very double, and blooms all summer. The foliage does not show so much of the Rugosa type as Blanch de Coubert. Has stood on our grounds without winter protection, and came through in perfect condition. We consider it the best of its color.

Hansa. Deep violet-red, double. Buds are borne in clusters and nearly all open at once. Has the true Rugosa foliage, and is one of the most valuable roses we have. It is absolutely hardy.

New Century. A grand rose that is entirely hardy, bearing beautiful silvery-pink flowers in clusters. This rose is in bloom all the time. Extra fine.

Nova Zembla. A sport from Conrad F. Meyer, inheriting all the good qualities of its parent with the added merit that the flowers are pure white, full and sweet-scented; very fine. A rose that will be widely planted.

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

Sir Thomas Lipton. The best pure white Rugosa Rose. Strong and vigorous; grows four feet high. Flowers perfectly double, pure snow white. Fragrant, borne on long stems continuously throughout the season. Absolutely hardy everywhere. Splendid for hedging, cemetery and park work.

Prairie or Bush Roses

These are used more and more each year in landscape work for grouping amidst other shrubs. They are mostly single-flowered, are very hardy and need no protection.

Carolina. Marsh Rose. A tall-growing wild rose with single pink flowers, followed by showy red fruit. Prefers moist situations.

Rubiginosa. Sweetbriar. Most valued on account of its deliciously scented foliage. Flowers are single, pink.

Setigera. Prairie Rose. A hardy climbing rose, with large, single, pink flowers in clusters, blooming after others are gone.

Hansa Rose.

Felix Crousse Peonies in Border Planting.

Larkspur—Delphinium.

Phlox.

Hardy Perennials

No ornamental lawn planting, whatever 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.

Aquilegia - Columbine

Handsome, long-spurred flowers, borne on long stems above masses of beautifully lobed and cut foliage. The flowers are quaint in shape, exquisite in color, and stay fresh a long time after cutting. Grows 18 to 24 inches high and blooms in spring and early summer. We list two varieties.

Golden-Spurred. Yellow, with yellow spurs.

Rocky Mountain. Blue and white. The state flower of Colorado.

Anemone - Windflower

Very showy plants, with handsome foliage and bearing beautiful single flowers with yellow centers on long stems. Grows 2 to 3 feet high and blooms from September until cut down by frost. We have it in pure white.

Achillea - Yarrow or Milfoil

The Pearl. Small, double white flowers, covering plant in July. Invaluable for borders. One of the prettiest flowering plants and should be in every garden.

Bleeding Heart

Dielytra or Dicentra spectabilis. The old-time favorite, with daintily lobed foliage and sprays of pink, heart-shaped flowers. Blooms April to June. 2 ft. high.

Boltonia - False Chamomile

An autumn-flowering plant with thousands of aster-like flowers open at once. Produces a showy effect. Season is during August and September. 4 to 6 ft.

Coreopsis - Tickseed

Showy and valuable free flowering perennials, continuing in bloom the entire summer. Large yellow flowers on long stems; fine for cutting; early summer until frost. 3 feet.

Chrysanthemums

The small flowered, hardy, pompon chrysanthemums are becoming very popular again; they are the only perfectly hardy ones we have, and give showers of bloom long after frost in the fall. We can supply Red and White.

Delphinium - Larkspur

A remarkably showy class of tall growing plants, producing magnificent spikes of blue flowers in summer. We know of no plants which will afford greater satisfaction than these.

Daisy, Shasta

This is one of the Chrysanthemum family, growing 18 to 24 inches high and bearing during June and July great masses of daisy-like flowers, with white petals and yellow centers, 4 to 5 inches in diameter. It is valuable as a cut-flower, as the blooms will last two weeks or longer in water. Very popular perennial.

Day Lily, White

Handsome border plant, with broad, variegated foliage and bearing large clusters of beautiful, snow-white lilies with very sweet perfume. As it grows but a foot or two high, it is good for planting in front of the shrubbery, or perennial border, but is very effective when planted in groups on the lawn. The flowers appear in July, and continue for several weeks.

PERENNIALS—Continued.

Day Lily, Yellow

A long, narrow-leaved plant, with flowerstalks 2 to 3 feet high. In June these bear great masses of beautiful lily-like, lemon-yellow flowers of great fragrance. Fine for corners or in front of shrubby borders.

Foxglove - Digitalis

Flowers purple, pink or white, in long terminal racemes; two to three feet. June to August.

Golden Glow

Rudbeckia laciniata. Golden; early summer till frost.

Gypsophila - Baby's Breath

Paniculata. 2 to 3 feet. Produces large panicles of very small white flowers. June, July, and August. Fine for decorating in connection with high-colored flowers.

Hollyhock

The well known tall and stately favorites of the old-time garden, but so much improved that they would not be recognized by the old growers. Pink, Red, White, and Yellow. They bloom in July and continue for weeks.

Gaillardia - Blanket Flower

A genus of very ornamental, hardy plants. Flowers crimson and gold, 2 inches across, single or naked stems. Very showy. Early summer until autumn. Does well on light soil. Must have winter protection.

Iris

No flower in the perennial border surpasses the Iris in delicacy of texture and color, or is more showy and pleasing in general appearance. They rival the Orchids of the tropics in beauty.

German Iris.

Shasta Daisy.

Iris, German. One of the most interesting of all perennials, with magnificent flowers in all colors. Has broad, lance-like foliage, and the wonderful flowers are produced on long stalks. May and June. Blue, pink, purple, variegated, white, and yellow.

Iris, Japan. The most gorgeous of all the Irises, with large, flat flowers of three or six petals in all colors of the spectrum, veined, splotted and striped in a bewildering manner. Blooms in July after the German Iris is through. Same colors as the German variety.

Iris, Siberian Purple. We regard this as one of the most desirable plants for a border, or for marking lines, etc., known to us. It is very persistent, and will hold its own in blue-grass sod. Foliage long, slender and graceful; flowers borne on slender stems about 18 inches to 2 feet high, usually two or three flowers on a stem. The flowers are a deep, clear purple and very graceful. It is perfectly hardy, and we consider it one of the most desirable of the Iris family.

Iris, Siberian White. Very similar to the purple variety excepting the flowers are pure white.

Lily-of-the-Valley

This is as hardy as any plant can possibly be, and when planted in the open ground will increase rapidly.

Monarda

One of the showiest and most brilliant of our perennials, with large heads of fragrant scarlet flowers. Will grow 1½ to 2½ feet high, and flourish in any soil. Is a beautiful adornment to the flower garden.

Clump of Festiva Maxima Peonies.

Peonies

Fine hardy plants, rivaling the rose in perfection of bloom and coloring, and requiring little care, as they thrive and do well in any soil. Colors range from pure white to deep crimson. Can be planted in September or October and in the spring. Those listed are double unless indicated.

Delicatissima. Pale lilac rose. Mid-season. Extra good keeper and shipper. Similar to Floral Treasure.

Edouard Andre (Mechin). Large globular bloom, deep-crimson-red, shaded black. When once seen always remembered.

Felix Crousse. Brilliant red, ball-shaped bloom; the popular color with florists; rather late.

Festiva alba. Large, globular, pure white with a few spots of carmine in the center; beautiful and sweet.

Festiva maxima. This is the most beautiful of all the white Peonies. The flowers are of extra large size, in clusters, and petals as fine as silk. Color pure white, with a crimson drop in the center.

Grandiflora rubra. Large; late; fine form, blood-red.

Golden Harvest. Very large blooms, blush guard petals, creamy white center; mid-season. One of the freest bloomers.

Louis Van Houttei. Dark red, the richest color of our collection, medium season, very early and free blooming. The king of the dark reds, as seen at a distance it fairly glows like a ball of fire. Very striking and effective in bouquets.

L'Eclatante. Brilliant red. Mid-season. Very good.

Madame de Verneville. Bomb type, early; one of the best varieties on the market. Guard petals pure white, very large; the blooms are very full and double, of the purest white except a few cream colored petals and four red flakes on central petals. Has the true June rose fragrance.

Marie Lemoine. Large, very compact flower, sulphur white, occasionally carmine tipped. Very late. Extra good commercial variety.

Prince Imperial. Brilliant purplish scarlet, free bloomer. Fine for massing in landscape work.

PERENNIALS—Continued.

Reine des Francaise. A beautiful variety; outside petals rose, inner petals white.

Victorie Tricolore (Van Houtte). Rose pink and salmon, an excellent bloomer.

Hardy or Garden Phlox

(*Phlox paniculata*)

One of the favorites of long ago, in which great improvement has been made by cultivation. From the old-time clusters of purplish pink flowers has been evolved a most magnificent family of hardy perennials, bearing enormous trusses of magnificent flowers in every conceivable shade of color from a crimson so deep that it is almost black, to pure, glistening white, some of them being marked and tinged most beautifully. The list following contains the very best of all the varieties, and will keep up a succession of bloom from early summer to fall.

Bridesmaid. Pure white with crimson eye.

Elizabeth Campbell. Soft pink, large flower; distinct.

Eclairer. Purplish crimson, with lighter center. An early and continuous bloomer; flower large.

Jeanne d'Arc. Pure white, very fine, late.

Le Mahde. Deep purplish violet, with darker eye.

Pantheon. Deep salmon rose.

G. A. Strohlein. Beautiful variety. Scarlet-orange flowers, with bright carmine eye; extra large flowers, enormous clusters.

R. P. Struthers. Bright rosy red, crimson eye. One of the best varieties.

Ryndstrom. Color a lively shade of rose-pink, much like Paul Neyron rose; flowers very large. One of the best for massing.

Richard Wallace. White, rosy center.

Von Lossburg. Pure white, very large.

Physostegia - False Dragon Head

The Virginica is probably the most desirable one of this group. During September and October it bears spikes of bright pink flowers. 3 feet.

Poppy, Oriental

For a gorgeous display of rich brilliant coloring nothing can excel the Oriental Poppies during their period of flowering in May or June, and whether planted singly or in masses their large flowers and freedom of bloom render them conspicuous in any position.

Rose Mallow - Hibiscus

The Hibiscus are valuable border plants, having handsome broad leaves and large showy blossoms.

Sedum - Stonecrop

Spectabile. A dwarf plant with light, fleshy, glaucous foliage, and covered with flat heads of pink flowers that are retained on the plant for a long time. Will grow almost anywhere excepting moist places. Indispensable for late blooming.

Tiger Lily

Bright orange scarlet with dark spots; a strong growing, showy variety, and entirely hardy. Succeeds well everywhere.

Yucca Filamentosa

Creamy white, bell-shaped flowers in July, borne in great profusion on a magnificent stalk, 4 to 5 feet high. Fine for planting in front of evergreens.

Climbing Vines

Ampelopsis - Ivy

Virginia Creeper or American Ivy (*Quinquefolia*). A perfectly hardy, rapid climber, with large, five-lobed leaves which change to bright scarlet or crimson in autumn.

Engelmani Ivy. Shorter jointed and having finer foliage than *Quinquefolia*. Clings to brick or stone. A good grower and hardy. The best for the North and Northwest.

Boston or Japan Ivy (*Veitchii*). From Japan. It is a splendid plant for covering any object, as it clings perfectly to the smoothest surfaces. The foliage is a bright glossy green, changing to bright tints of scarlet, crimson and orange. Kills back some in a cold, dry climate.

Aristolochia

Dutchman's Pipe (*Sipho*). A native species of climbing habit and rapid growth, with magnificent light green foliage, ten to twelve inches in diameter, and curious, pipe-shaped, yellowish brown flowers; a splendid variety for archways or verandas.

Clematis

This family of plants is noted for its rapid, slender growth, delicate foliage and profusion of bloom through the summer. They do best in rich soil, and where they can have plenty of sun. We give a few of the best only. Give winter protection in this section.

Henryi. A robust plant and free bloomer. Flowers creamy white. A hybrid of *C. langinosa*, and *C. florida*, but most resembling the former.

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

Madame Edouard Andre. Flowers a beautiful, bright, velvety red.

Clematis Paniculata.

Engelmani Ivy.

Paniculata. One of the most desirable and beautiful hardy garden vines, being a luxuriant grower and profuse bloomer, and possessing fine foliage; particularly useful for covering verandas, pillars, fences, etc.; flowers are medium size, star-shaped.

Celastrus - Bittersweet

Bittersweet (*Scandens*). A native climbing or twining plant, with fine, large leaves, yellow flowers and clusters of orange capsuled fruit. It grows 10 to 12 feet in a season.

Climbing Honeysuckle - Lonicera

Favorite vines with delightfully fragrant flowers. Perfectly hardy and adaptable to any purpose.

Hall's Japan (*Halleana*). An almost evergreen variety, with pure white flowers, changing to yellow; very fragrant and a vigorous grower. Covered with flowers from July to October. Best blooming of all.

Monthly Fragrant (*Belgica*). Flowers red and pale yellow; sweet scented; blooms through the summer.

Scarlet Trumpet (*Sempervirens*). Flowers deep red, trumpet-shaped; flowers all summer; a native climber and appropriate for trellises and rockwork. One of the handsomest.

Lycium - Matrimony Vine

Matrimony Vine. A vigorous climbing vine, with small star shaped purple flowers, succeeded by bright scarlet berries, which remain on the vine all winter. It is hardy and will thrive almost anywhere.

Tecoma - Trumpet Flower

Trumpet Creeper (*Radicans*). A splendid, hardy, climbing plant, with large trumpet-shaped scarlet flowers in August.

Wistaria

Chinese Purple Wistaria (*Sinensis*). One of the most elegant and rapid growing of all climbing plants; attains immense size; has long, pendulous clusters of pale blue flowers in May and June; also blooms late in autumn.

Chinese White Wistaria (*Alba*). Flowers are pure white and is regarded as one of the best varieties.

Bulbs and Tuberous Rooted Plants

For Spring Planting

Canna

Stately and highly ornamental plants, for both flowers and foliage. They attain a height of 2 to 5 feet, and may be grown singly or in masses. Leaves green or brownish red; flowers scarlet, crimson, yellow, cream, etc., variously marked.

Dahlias

The Dahlia is coming to the front in the ranks of summer flowering plants. There is nothing that can equal them in range of color and abundance of bloom. They are splendid for cut flower work and command attention wherever grown. Plant in good, rich garden soil; set three feet apart and for best results allow but one stalk in a hill; before freezing weather, dig and store in frost-proof cellar. We can supply a choice collection of colors.

Gladiolus

The Gladiolus is the most attractive of all the summer flowering bulbs, and deserves a place in every garden as it is sure to flower and do well with very little care. Set the bulbs from 6 to 9 inches apart, and about 4 inches deep. Plant from middle of March to first of June. We can supply choice varieties.

Bulbs for Fall Planting

Crocus

A universal favorite; one of the earliest garden ornaments; should be planted about 2 inches deep. Blue, White, Yellow, and Striped.

Hyacinths

The most beautiful and fragrant of early spring flowering bulbs, much used for winter forcing. Pink, Red, Purple, Violet, and White.

Narcissus

Pretty varieties of the Narcissus, having a very agreeable fragrance; adapted to either pots or outdoor culture.

Narcissus, Paper White Grandiflora, Large Flowering. This large flowering type is such an im-

Dahlias.

provement over the ordinary "Paper White" that we have discontinued offering the latter. The "Large Flowering" is more vigorous and earlier, producing purest snow-white flowers of large size and good substance. This Narcissus does splendidly when grown in bowls of water and pebbles or moss.

Tulips

We know of nothing that for the money invested will give a more gorgeous show during early spring and there is nothing more easily grown than the Tulip. Should be planted in October or November.

Narcissus.

How and When to Spray

PLANT	First Application	Second Application	Third Application
APPLE— Canker worm, codling moth, scab.	Spray before buds start, using Bordeaux.	After the blossoms have formed, but before they open. Bordeaux, Paris green.*	Within a week after blossoms have fallen, Bordeaux and Paris green.
CHERRY— Rot, aphid, curculio and slug.	Before buds start, use Bordeaux. For aphid, kerosene emulsion.	When fruit has set, Bordeaux and Paris green.*	10 to 12 days later, if signs of rot appear, repeat.
CURRENT, GOOSEBERRY— Worms, mildew.	As soon as worms are seen, Paris green.	If they reappear, repeat, adding Bordeaux for mildew.†	If worms still trouble, hellebore.
GRAPE— Flea-beetle, fungous diseases.	Before buds burst. Bordeaux and Paris green.	When first leaves are half grown Bordeaux and Paris green.	As soon as fruit has set, repeat.*
PEAR— Leaf blight, scab, psylla and codling moth.	Before buds start. Bordeaux.	Within a week after blossoms fall, Bordeaux and Paris green.	10 to 12 days later, repeat.
PLUM— Black knot, rot and all fungous diseases and curculio.	As buds start, Bordeaux. Cut out knot and burn.	When fruit has set, Bordeaux and Paris green.*	10 to 12 days later, repeat.
RASPBERRY, BLACKBERRY— Anthracnose, rust.	Cut out badly diseased canes. Spray with Bordeaux, before growth starts.	When new canes are one foot high, spray with Bordeaux mixture.	10 to 14 days later, repeat.†
STRAWBERRY— Rust.	Just before blossom opens. Bordeaux and Paris green.*	When fruit has set, Bordeaux.*	As soon as berries are harvested, Bordeaux, if to be kept longer.

SPECIAL NOTES

For Black Knot on cherries and plums, cut out and destroy by burning the diseased parts as soon as discovered.

For Aphid on all plants, use kerosene emulsion or Ivory soap.

If Red Rust appears on raspberries or blackberries, the entire stools affected should be cut out and burned.

Young Plants should be sprayed with Bordeaux mixture at the time of the first and third application to bearing plants.

EXPLANATION

Whenever an asterisk (*) is used, it cautions against spraying with poison while the plants are in blossom; a dagger (†) indicates that there is danger of making an application within three weeks of the time the fruit is to be used as food. While the number of applications recommended will be found desirable, in seasons when the fungi are less troublesome a smaller number may often suffice. Always strain ingredients used into the sprayer to avoid clogging the sprayer.

Spraying

Each year's experience shows more plainly that to grow nice, smooth fruit we must spray. The main things for us to combat are:

Biting Insects—Such as codling moth (apple worm), currant worm, curculio, etc.

Sucking Insects—The green, red and black aphid.

Fungus—Apple scab, plum rot, currant, and gooseberry mildew. While we may not be able to do away with these pests altogether, we can, to a great extent, control them and successfully grow fine fruit. One must begin in season and do the work intelligently and thoroughly in order to be successful. The following are the best known remedies at the present time:

INSECTICIDES

For Biting Insects:

Paris Green Mixture:

Paris Green1 pound
Fresh (Unslaked) Lime1 pound
Water200 gals.

Hellebore Solution:

White Hellebore (fresh)1 ounce
Water2 gals.

There is no danger in using Hellebore solution on currants and gooseberries after the fruit is formed.

For Sucking Insects:

Kerosene Emulsion—Dissolve one pound of hard soap in two gallons of boiling water. Remove from fire and while hot add two quarts of kerosene. Churn or shake the mixture until it assumes a creamy consistency. This should be done while hot. To this add six gallons of water before using.

FUNGICIDES

Bordeaux Mixture:

Copper Sulphate 5 pounds
Fresh Lime 5 pounds
Water50 gallons

The copper sulphate and lime should be dissolved and prepared in separate vessels (wood or fiber). After the sulphate is dissolved and the lime slaked, they should be thoroughly mixed. The color of the mixture should be an intense blue.

When spraying for both biting insects and fungus, the Paris green and Bordeaux mixture may be mixed and in this way perform two operations at once.

We can supply our customers with up-to-date spray pumps. Prices and illustrations will be sent upon application.