

Historic, Archive Document

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

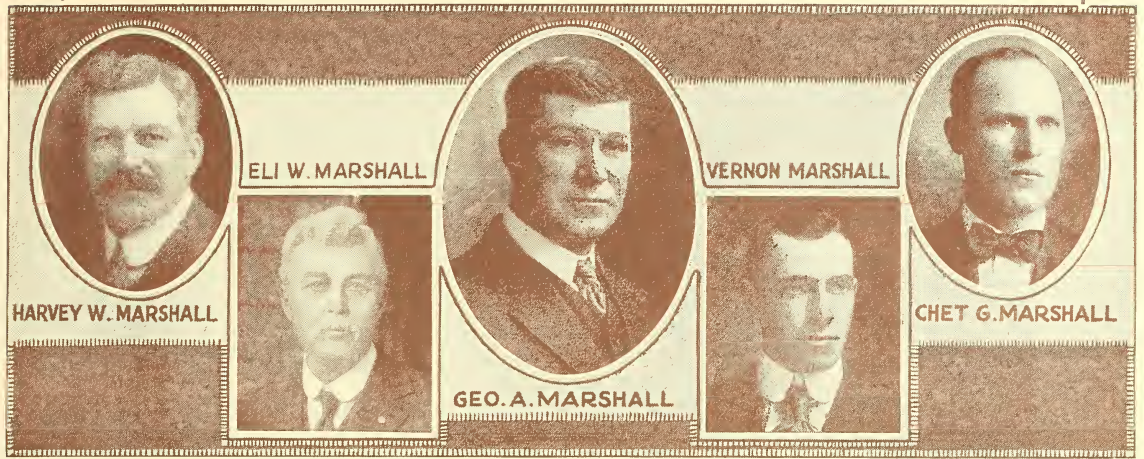
62,51

1926

LIBRARY
JAN 20 1926
U. S. Department of Agriculture

TREES, SHRUBS AND PLANTS

**MARSHALLS
NURSERIES
ARLINGTON, NEBR.**



FOR thirty-five years we have been supplying fruit growers and flower lovers throughout the Central West, with fruit trees, plants, and shrubs, and have a long list of fully satisfied customers—our friends and boosters for our nurseries. The stock sent out from Marshalls Nurseries and the service rendered, makes the name of Marshall synonymous with horticulture in the West, and with the best in all kinds of fruit trees and plants, evergreens, ornamental and shade trees, shrubbery and hardy flowers. Our reputation has been built up on the merit of the stock produced and sent out and the principle of guaranteeing satisfaction to customers at all times.

We grow a complete line of nursery stock adapted to the Central West. Only varieties of known hardiness and behavior are featured, and those especially hardy and meritorious are marked with an asterisk (*). We have a trial ground where new and promising varieties are tested, and added to the lists of varieties to grow and disseminate, or are discarded. We also co-operate with the various experimental stations in testing out new sorts.

We employ only men who are honest and trustworthy to represent us. These men are carefully instructed about varieties for their respective districts, planting, culture, trimming, etc., and are always glad to advise customers. We are also always willing and anxious to answer, from our office, any inquiries at any time. We want our customers to feel free to call on us.

We put out only first class stock. We do not list undersized, so called "parcel post size" trees and plants, hence our prices may not seem as cheap as those played up by some catalog nurseries. Our culls, which correspond to the runts in the farmer's herd of pigs, are burned. The customer gets only first class stock the right size for its age, and not 3 and 4 year stunted stock called one or two year old stock. Our prices are as low as it is possible for us to make them, considering quality.

In preparing this book we have tried to make it more of a hand book on trees, shrubs, and plants for the planter of the Central West than has been the rule with most nursery catalogs. We have described in more detail, giving the special uses for which they are best suited, varieties that have been proven thoroughly adapted to the territory. Descriptions are as accurate as our knowledge will permit us to make them and are in no way overdrawn. A list of stock selected from this book, guided by the descriptions given, will be suitable for the purposes desired.

Marshalls Nurseries, Arlington, Nebraska



Evergreen Blocks at Marshalls Nurseries

The Nurseries

THE nurseries, comprising 300 acres, are located two miles east of Arlington on the high divide between the Elkhorn and Missouri rivers. The soil is of the famous "Loess," which is recognized by nurserymen and orchardists and recommended by geologists, as particularly adapted for root development. Trees and plants grown on this soil have more fibrous roots which makes transplanting more successful. The wood growth is also firmer and more mature than that of stock grown on rich valley soils. The root system is the really important part of every tree and plant. Marshalls' trees have better roots.

How Stock Is Grown From the beginning it has been the aim of Marshalls to grow the best trees and plants that it is possible to grow. No expense incidental to care, cultivation and handling of nursery stock that will tend to make it better, is spared. The most intensive cultivation is practiced from the time the ground thaws out in the spring until it freezes in the fall. Moisture is conserved for the growing trees and plants and all nursery land is absolutely free of weeds at all times.

The pruning, pinching back, spraying and other operations essential to the growth of the best formed, well ripened stock is done only by experts and at exactly the right time for best results. It costs more money to grow stock this way but the stock is better.

Guarantee We exercise the greatest care to keep our varieties pure and true to name, and hold ourselves in readiness at all times to replace, on proper proof, all stock that may prove otherwise, or refund the amount paid, but it is mutually agreed between the purchaser and ourselves that we shall not at any time be liable for any amount greater than the original price. Marshalls' trees and plants are guaranteed to be free from infectious diseases and dangerous insects—healthy, vigorous and well-formed. A State Inspector's Certificate accompanies each shipment.

Packing Our Packing Building contains 25,000 square feet of floor space. It is constructed of brick and tile with walls 18 inches thick. The roof is also insulated against heat and cold. This provides unexcelled facilities for handling and packing out of nursery stock. Changes of temperature in this building are very slow and with the moist, cool cellar condition which prevails, there is no chance for stock to dry out or be injured in any way from the time it is dug until it is delivered to the transportation company.

All stock is packed to stand, for three weeks, the usual conditions encountered on station platforms, in freight cars and at transfer points. Water-proof paper covers the wet packing material about the roots—each bale being then entirely covered with burlap and rye straw.

Shipping Facilities We are located on the main line of the Chicago and Northwestern Railway, with excellent freight service, and twelve express trains daily. We guarantee stock to reach its destination in prime condition.

Come and See Us We are proud of our nurseries and packing equipment, and take pleasure in showing lovers of trees and plants what we grow and how we handle it. Come and visit us at any time. You are always welcome and we will be glad to have you come whether you are in the market or not.



Strawberries and other Small Fruits at Marshalls Nurseries

Planting, Pruning and Care

Care of Stock The bundles should be opened immediately, the roots dipped in water, then heeled in moist ground so that the mellow earth will come in contact with the roots and thoroughly protect them from the air, having the earth tramped solid about them.

When ready to plant, take up only a few at a time, puddle the roots and do not allow them to lie exposed to the sun or air.

The ground should be carefully prepared by deep plowing and firming down with a disc and harrow.

Planting The holes for planting must be large enough to receive the roots freely, without cramping or bending them from their natural position. All broken or mutilated portions of the roots must be cut off so as to leave the ends smooth and sound. All trees should be planted two or three inches deeper than they stood in the nursery row; pack the soil very firmly about the roots by tamping with the feet or post tamper, being careful not to bark or break the roots. Leave three inches

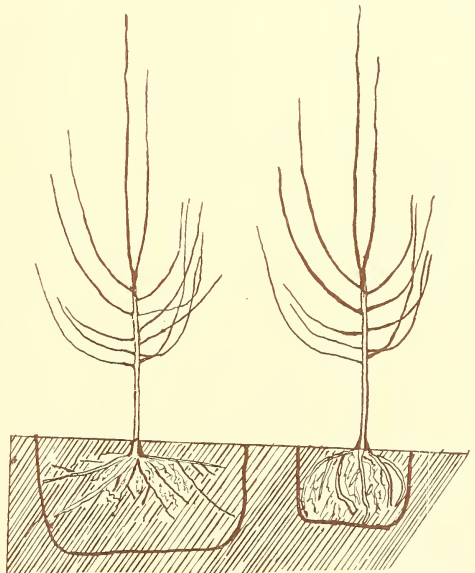
of the surface soil loose to serve as a mulch. If the ground is very dry apply one to two pails of water before this soil mulch is in place, and after the water has soaked away it can then be placed over the moist soil.

Mulching Unless thorough surface cultivation will be practiced during the summer a mulch should be applied. This may be a layer of coarse manure or vegetable matter around the trees three to six inches deep, and extending out from the trees three or five feet. Mulching protects the soil against the sun and drying winds; against alternate freezing and thawing, and provides some plant food.

Number of Trees and Plants on an Acre

40 feet apart each way.....	27
30 feet apart each way.....	50
25 feet apart each way.....	70
20 feet apart each way.....	110
18 feet apart each way.....	135
15 feet apart each way.....	205
12 feet apart each way.....	300
10 feet apart each way.....	435
8 feet apart each way.....	680
6 feet apart each way.....	1210
5 feet apart each way.....	1745
4 feet apart each way.....	2725
3 feet apart each way.....	4840

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



Almost Sure to Live **Almost Sure to Die**
Dig holes large enough to admit roots in natural position. Set several inches deeper than stood in nursery row. Pack soil solid about roots.



Digging trees with modern digger. You get all the roots

Pruning The pruning of trees should begin when they are planted. The transplanting of a tree marks a very critical point

of its life history, and to neglect careful and proper methods of planting and pruning at that time is to invite disaster or, at least, unsatisfactory returns from one's efforts.



Apple and Pear—Select from three to five of the branches to form the permanent head of the tree. These branches should be well distributed around the trunk, and at safe distance apart up and down the trunk. If two branches come out, one exactly opposite the other, forming a crotch, a split may occur at this weak point in later life, when the tree is full of fruit. Shorten these selected branches to about five buds, cutting the branches just above a bud that points outward. Remove all the other branches close to the trunk, leaving no stub longer than one-eighth to one-quarter inch. Also shorten back two-thirds the central leader of the tree, if one exists, else the tree assumes a too upright growth for best results in later life. See illustrations.

Cherry—Five or six good limbs, well distributed around the trunk will be sufficient to form a well balanced top. The limbs left after pruning should not be cut back as severely as recommended for some other classes. See illustrations.

Plum—Cut back all branches to about two or three buds. After the tree has grown for a year, remove all but four or five branches, but do not cut these back. These limbs will form the permanent framework for the top and subsequent growth may be pruned to meet the requirements or taste of the planter. See illustration.



Apple Plum Cherry Peach

Showing how to trim trees when planted; upper, before and lower, after trimming. Very important.

Small Fruits Gooseberries and Currants—Prepare the ground by deep plowing or spading. Cut the plants back fully one-half. Plant four feet apart both ways, same depth as plants stood in the nursery row, and firm soil well.

Blackberries, Raspberries, Dewberries—These should be set fairly deep, except one-year-old raspberry plants, the new growth of which starts from the crown in the mass of hair-like roots; these should be planted shallow, with the crown not more than one inch below the surface. Too deep planting is often fatal to



Block of 1-year Plums at Marshalls Nurseries

one-year-old raspberry plants. Plant in rows five or six feet apart, with plants three to four feet apart in the row. Firm the dirt around each plant. Keep surface of ground loose. Water in dry weather during growing season. Mulch in winter after the ground is frozen.

Strawberries—Plants should be set and cared for the same as tomato and cabbage plants. Plant in rows three to three and one-half feet apart and twelve to fifteen inches in a row. The cheapest way to grow them is to plant in long rows and tend with a corn plow, using shields. Never allow rows to spread to more than eight or ten inches in width. Cover the plants late in the fall with one or two inches of prairie hay or stable litter (if free from weed seed). This covering should be removed from the plants in early spring and left between the rows until the fruit is picked, then it should be removed from the patch and the rows cultivated the same as before.

Grapes—These should be planted ten to twelve inches deep in holes large enough to admit roots without curling them, pressing soil solid about roots. Cut vines back to within three or four buds of the roots. Keep the ground clean by cultivating; if impossible to cultivate, mulch. Prune in November before covering for winter. We regard covering as profitable and in most sections as essential. Use coarse hay or dirt in covering.

Asparagus—Prepare ground by deep plowing or spading. Set plants twelve to eighteen inches each way, three inches deep, with roots well spread out. Every fall mulch the bed well with manure.

Rhubarb—Prepare ground as for asparagus. Set the plants with crown or eye two inches under ground. Plant three feet apart each way. Mulch in winter. Give clean cultivation the same as for any other crop.

Shrubs If planted in beds or groups the ground should be spaded deeply and well worked. If shrubs are set as individual specimens they should be planted the same as trees.

Set shrubs at the same depth as they stood in the nursery row, or with their crowns at about the surface of the ground. Water the plants well during the hot, dry weather and keep the ground well stirred around them. Most shrubs require judicious pruning at planting time, and subsequently. When shrubs are planted it is advisable to cut them back from one-half to two-thirds with few exceptions.

Hedges Privet—Dig trench twelve inches deep or more and set the plants four to six inches deeper than they stood in the nursery row, or deep enough so the lower branches will be four to six inches under the ground. Such deep planting will make a compact hedge down to the ground line, but if the plants are set shallow there will always be undesirable open spaces at the base of the hedge.

STRAWBERRIES



Just right.

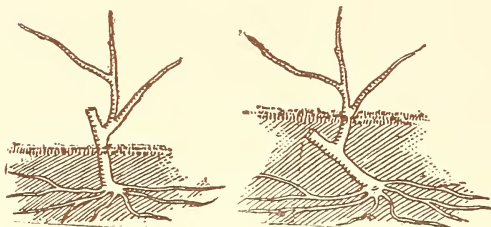


Too shallow.



Too deep.

GRAPES



Planted too shallow. Planted just right.

Some planters set Privet in a double row, eight to ten inches apart each way, which makes a very dense hedge. Cut Privet back to six inches when planting to promote thick new growth at lower part of plant.

Barberry-Spirea—Should be planted in the same manner as shrubs, either in trenches for hedge or as groups or individual specimens. Cut back and thin out one-half of top wood.

Roses If roses are planted in the ordinary way with the tops left exposed to the sun and drying winds of the spring, they are almost sure to shrivel before time for them to grow, and thus the plants are greatly endangered, while if the following suggestions are followed, success is almost certain. The plants should be unpacked as soon as received from the nursery and planted, if possible. If unable to plant them immediately upon receiving them, they should be heeled-in deep (buried) in moist, loose earth, waiting time to plant. In planting they should be set two or three inches deeper than they stood in the nursery in well-prepared, damp soil, but not wet enough to be muddy. If the soil is dry it is well to plant the roses solidly, then wet thoroughly, and after the water has soaked away, throw up a small mound of earth five or six inches high around the plant. Then cut off the branches about one inch above the mound, leaving it this way for ten days or two weeks, or until the buds start and show a desire to grow, when the dirt mound can be raked down. Roses handled in this way hardly ever fail to make a good start and a very satisfactory growth.

Bulbs and Roots Prepare the ground by deep spading twelve to eighteen inches, and work it into a well pulverized condition.

Peonies—Should be set with the crown two to three inches below the surface of the ground. Plant one and one-half feet apart. Mulch heavily after the ground is frozen and remove mulch in the spring.

Iris—Should be set with the crown two inches below the surface. Plant twelve inches apart. Mulch as for Peonies.

Phlox—Set the crown one inch under the surface and spread out the roots. Firm well. Mulch in winter. Water in summer. Plant twelve inches apart. Gaillardia, Delphinium, Platycodon and other perennials should be planted about like Iris and Phlox.

Shade Trees **Ornamentals**—Dig holes large enough to accommodate all roots without bending or cramping. Fill the hole with good top dirt and firm it hard. When

the hole is three-fourths full, allow a bucket or more of water to seep away around the roots, after which the hole may be entirely filled. It is well to mulch the tree immediately to prevent drying out. Prune all limbs back to five or seven good buds, even though the appearance of the tree is impaired by such treatment. Water trees during the summer months and give them plenty of attention until they have become well established. Large sizes of shade trees can often be staked to advantage until their roots have obtained good anchorage in the soil.

Evergreens These should be planted extremely solid, but be sure that all vacancies under the pronged roots are well filled with soil first, then press or tamp the soil so solid that the tree cannot be easily pulled up, leaving two inches of the soil loose to prevent baking and to take in the rainfall. Be careful never to expose the roots to the sun and air long enough to dry them in the least, and if necessary to water them, it is better to dig a hole by the side of the tree one foot deep and water them through the hole. This applies to the watering of all trees. Better to water two or three pailfulls at a time in seven or eight days, as needed, than to pour water on the surface, which often does more harm than good, by crusting the surface and attracting the roots upward for moisture, instead of downward. Mulch with old hay or chaff, throw a little soil on the mulching and it will look better and will be more effective. Evergreens should be watered during a drought in mid-summer or fall as well as spring. The ground should be filled with water at the approach of winter and then mulched. They do not need the above care after the first year. After planting protect evergreens in yard by placing a screen about each to keep dogs away.



Rose Bushes Just Planted—Before and After Trimming.



FRUIT DEPARTMENT



THE APPLE

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

Every farm home should have a family orchard. The hardier varieties will thrive and bear fruit in Nebraska and adjoining states even where climatic conditions are most severe. No farm home plan is complete or desirable without its quota of apple trees. Twenty-five to fifty trees occupy only a portion of an acre of ground and will furnish the family with an ample supply, one year with another.

Commercial apple growing is very profitable in the more favored sections of the territory. The rolling land adjacent to the Missouri River (one to two tiers of counties from the river), is particularly adapted for commercial orcharding.

We have cut down our list of varieties and are growing and offering only such sorts as have been thoroughly tested. The varieties that are really valuable in the Central West are described quite fully, while those of less value are described more briefly. The very hardiest varieties are marked with an asterisk (*). Keep these in mind when making selections for the North and West, where climate is sever and rainfall light.

For planting and culture instructions see page 3.

SUMMER APPLES

***LIVLAND** (Livland Raspberry). This variety is quite new but is very promising. It is of Russian origin and is undoubtedly one of the very hardiest. It has been planted quite extensively in the Dakotas and Western Minnesota during the past few years and seems thoroughly at home. It is one of the earliest to ripen, usually being at its best in late July. The fruit is medium to large, splashed and

shaded with red; flesh stained with red, fine, tender, juicy and slightly tart; extra good and very beautiful. It is a fine dessert apple and makes excellent sauce, pies and jelly. Bears young.

***OLDENBURG** (Duchess). This apple is too well known to need description to most planters. It is of Russian origin and one of the hardiest. It adapts itself to a wide range of terri-



tory and is a favorite early commercial variety in almost every northern apple section. The tree is one of the best with upright head requiring little pruning. Fruit is large, striped and beautiful, ripening in August but makes excellent sauce and pies as early as July, when only half matured. It contains too much acid to be a good eating apple, but should be in every home orchard for cooking. It finds a ready sale on all large markets and on account of it being suitable for use so early, it always brings a good price. A good annual bearer. Bears young.

***YELLOW TRANSPARENT.** A favorite home and commercial variety, especial in the North. Tree very hardy; an early and annual bearer. Fruit is large, pale waxen yellow, beautiful. Flesh white, tender, fine grained, of splendid quality. Is a favorite early dessert apple and is also suitable for cooking. Season July 15th to 20th. Should have a place in every home orchard.

CHENANGO (Strawberry). Fruit medium size, oblong; skin whitish splashed and mottled with crimson. Flesh tender and fine grained, juicy and mild. A splendid table apple. Tree moderately hardy and good annual bearer.

EARLY HARVEST. Early yellow apple. Quality good. July.

EARLY PENNOCK. Large early apple, quality fair; moderately hardy. July.

RED ASTRACHAN. Large, rich, juicy, tart; almost red. July.

RED JUNE. Small to medium. Good quality. Heavy bearer. June and July.

SWEET JUNE. Small to medium. Good quality, sweet. June and July.

TETOFSKI. Medium size. Good quality. mild. Bears early, hardy. July.

FALL APPLES

***WEALTHY.** Fruit large, variegated red; beautiful; full of lively, sub-acid juice; fine grained; splendid for eating; unsurpassed for cooking, jelly, drying or butter; a native of Minnesota; an early winter apple there, and one of their hardiest sorts; it is indispensable in the new Northwest; does remarkably through all the Central States and is a favorite wherever grown. Commences to bear young



Yellow Transparent

and is a heavy annual bearer. This variety should be in every orchard, family or commercial. September.

***HIBERNAL.** One of the hardiest of Russian varieties adopted by many prominent horticulturists as a standard of hardiness. Tree vigorous, sturdy and a good early bearer. Fruit large to very large, greenish-yellow with dull bronze red on sunny side; flesh tart, juicy, very good for sauce, baking and jelly. This is one of the ironclads for sections of extreme cold and semi-arid climates. October to December.

BELL. This variety is from a chance seedling found growing at Papillion, Nebraska, and has been tested out on our grounds for 22 years. It has proven itself perfectly hardy on our grounds. The tree resembles Jonathan and this with its quality indicates that it is a Jonathan seedling. The fruit is medium size, oblong; skin is deep red to almost black on sunny side; flesh is fine grained, juicy and mild. The quality is excellent, making it one of the best dessert apples of recent introduction. It also makes excellent sauce, pies and jellies. September. We recommend this variety for trial throughout the Central West.

MAIDEN BLUSH. This old variety is deserving of more general planting. The quality of the fruit is very high. Cooking tests show



Wealthy



that it stands among the best in more ways of cooking apples than any variety grown in the Central West. It scores high for pies, dumplings, jelly and marmalade, and well up the list for sauce. It is also one of the best dessert or eating apples. It is mild in flavor, the flesh is fine grained and juicy and the aroma is very pleasing. It is a beautiful waxen yellow with pink cheek. Fruit is medium to large, flat. The tree is quite hardy and is recommended for planting except in the extreme north and west parts of the Central West. August and September.

***DUDLEY.** This is a seedling of the Duchess of Oldenburg, and is apparently as hardy and productive as that variety, but its season is about two months later. A valuable variety for the Northwest.

RAMSDALL. This old variety is esteemed wherever grown for the annual crops which it bears of large, handsome fruit, conical, splashed and striped with dark red; flesh very tender, mellow, unusually sweet and rich, excellent. Fine for dessert or pickling and preserving. Tree very vigorous and comes into bearing early. October to December.

WARFIELD. Originated in Muscatine, Iowa. Tree hardy and thrifty, vigorous grower, an early and abundant bearer. Fruit large, light waxen yellow with blush in the sun, sparkled with gray dots. The stem is slender, calix large and open, flesh white and moderately juicy; mild. Good dessert apple.

BAILEY SWEET. Fruit large, striped. September.

DYER. Medium size, pale greenish-yellow, good. August and September.

FALL STRIPE (Saxton). Medium to small size, covered with light and dark stripes. Good quality. September.

FALL WINESAP. Fruit medium size; green with red blush; very good. September.

FAMEUSE (Snow Apple). Medium size; whitish ground, striped with red; flesh white.



Bell

juicy, fine quality; tree blights. October and November.

FULTON STRAWBERRY. Medium sized, streaked, desirable. August and September.

PRICE SWEET. Medium to large, greenish-yellow, streaked and splashed with dull red; very good quality. Perfectly hardy. September.

UTTER. Large, good quality. September to October. Perfectly hardy.

WOLF RIVER. Very large and handsome. September and October.

WINTER APPLES

BEN DAVIS. Almost too well known to need a description. Large, smooth, often mottled and splashed, nearly covered with red; mild. Until recently this has been one of the most profitable market fruits in the Central West. On account of its susceptibility to "Canker" it is losing favor and is not now planted so extensively. However, growers giving their orchard good care are still partial to Ben Davis and it is thought by some prominent fruit growers that it will soon win back, at least partially, its former favor. It has been most popular south of the Nebraska-Dakota state line and east of the 100th principal meridian and should not be planted extensively north and west of these lines. It is a very long keeping variety, a splendid pie, sauce and baking apple. It bears young. December to April.

DELICIOUS. This variety is one of the most popular, if not the most popular dessert or eating apple on the market. It is fully as good as its name implies—it is truly "Delicious." It is medium to large, oblong and of the sheepnose type. Color light green, shaded, splashed and mottled with light and dark crimson. It is fine grained, juicy, mild. Is fully as hardy as Winesap and should be given a place in every home orchard in the eastern half of Nebraska, Iowa and south and east. It is a valuable commercial variety in the Missouri River sections from Sioux City south.

GANO. This variety is supposed to be a cross between Ben Davis and Jonathan. It resembles Ben Davis very closely both in tree and fruit except the color in which the red is evenly overspread and shows no inclination to be striped. In hardiness, keeping qualities and season it is very similar to Ben Davis. This variety is preferred by some commercial growers on account of its better color.



Delicious

GRIMES (Grimes Golden). An apple of the highest quality. It is one of the fancy dessert apples and ranks with Delicious and Jonathan on the markets. Medium to large; bright yellow with pink cheek; flesh fine grained, juicy, with a very pleasing spicy flavor. Like Jonathan it is equally adapted to almost all culinary uses as well as for eating out of the hand. For pies, marmalade, sauce and dumplings, it is one of the best. It has hardly enough acid for the best jelly apple. The tree is hardy, grows upright and is quite disease and insect resistant. Season of fruit, November to January.

JONATHAN. This variety is probably better known to average consumers of dessert apples than any other variety. It is recognized on all markets of the country as one of the best among the few leaders of high quality eating apples. The fact that its qualities and flavor are also superior and outstanding when used for culinary purposes adds to its popularity. The fruit is medium size, red and beautiful. The tree is slightly slow of growth when young, but grows stronger as it attains age. It bears young and abundantly. It is quite hardy and thrives in all of the Central West except in the drier portions of the northwest part. Season November to February.

***MALINDA.** One of the best winter apples for the North. Will grow and thrive much farther north and west than standard sorts like Jonathan and Winesap. Should be planted only in the North and West. Fruit medium to large; skin rich yellow, with dull red blush; flesh firm, juicy, mild, almost sweet. An excellent baking apple, and suitable for sauce and pies. Season January to April.

***NORTHWESTERN** (Northwestern Greening). Tree of Wisconsin origin; vigorous grower and considered very hardy in that section; fruit large, smooth and handsome, of a greenish-yellow color. In favor wherever grown; a valuable variety. Indispensable north.

***PATTON'S GREENING.** Another of the extra hardy sort for the prairies of the Northwest. Fruit large; green with often a blush of red or brown; flesh rather coarse but firm. Fine for sauce, pies, jelly and baking. Season November to January. Plant only where conditions are severe.

***SALOME.** Above medium in size, partly shaded and striped with dull red, beautiful, tender, mild, slightly aromatic; very good. December to March. A very fair dessert apple and very good for sauce and jelly. Its hardiness, long keeping, good quality, uniform size, will no doubt make it valuable for the North and Northwest. Perfectly hardy and should be in every orchard.

STAYMAN WINESAP. Resembles Winesap, only larger and more striped. Tender, juicy, mild, splendid. A favorite commercial apple on city markets. Is desirable for both dessert and culinary purposes. Tree is a good grower, hardy and bears well as far as tested.

***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.



Jonathan

WINESAP. Medium size, dark red, juicy, mild. A favorite late winter apple and a leading commercial variety on all markets, as well as a very popular home apple in the West. Should be planted liberally both in commercial and home orchards south of Nebraska-Dakota state line and east of 100th principal meridian. Is a high class dessert apple; also good to very good for sauce, pies, jelly and marmalade. December to April.

WINDSOR (Windsor Chief)—Medium to large; greenish-yellow, suffused with red splashes, becoming quite red when ripe; flesh pale yellow, sometimes streaked with red; fine grained; juicy, mild, quality excellent. Is very much esteemed as a dessert apple. Fine for baking. Tree an upright, moderate grower, becoming stronger as it attains age. Early annual bearer; very prolific. December to March. Originated in Wisconsin. The highest award was won at the Paris Exposition from apples of this variety grown in our orchards near Arlington.

Winter Apples of Merit, But Not So Valuable in the Central West

ISHAM. Fruit large, oblong, conical, greenish-yellow; striped with dull red. November to January.

ARKANSAS (Mammoth Black Twig). Large, dark red, handsome; quality good. December to March.

IOWA BLUSH. Medium in size, whitish with red cheek; quality fine; tree vigorous and hardy on the prairies. November to January.

MINKLER. Fruit medium, splashed with red; flesh compact, moderately juicy, mild, pleasant. Tree moderately hardy. January to April.

MISSOURI (Missouri Pippin). Medium size, bright red, an early and abundant bearer. December to March.

NORTHERN SPY. Fruit large, striped with purplish-crimson; tender, very juicy. November and December.

PEWAUKEE. Fruit very large, green, striped and splashed with red. Hardy. September.

RALL'S (Janet or Geniton). Medium; has mixed and striped crimson on yellow and green; flavor is mild, vinous and refreshing. Popular as a home fruit. The blossoms appear later than any other sort, and thus they sometimes escape spring frosts. February to April.

ROMAN STEM. Fruit medium, whitish-yellow, splashed with russet; flesh tender, juicy, rich musky flavor; fine dessert apple; moderately hardy. November and December.

WESTFIELD (Seek-No-Further). Medium to large; slightly russeted with dull red stripes, tender, rich, spicy and fine; good bearer; moderately hardy. October to January.

SHERIFF (American Beauty). Above medium, nearly covered with light and dark red stripes; early bearer, productive and moderately hardy. November to February.

TOLMAN. Medium, pale yellow, firm, rich and very sweet. October to December.

VIRGINIA BEAUTY. Fruit medium to large, handsome and regular in form, with very dark red color. Quality excellent, mild. Season September to January.

***WALBRIDGE.** Medium size, striped with red, good cooking; very hardy and considered



Winesap

of value in the North and Northwest. December to January.

YORK IMPERIAL. Medium, white, shaded with crimson; flesh firm, crisp, juicy; a good bearer and keeper; moderately hardy. November to April.

CRAB APPLES

WITHIN the past few years much attention has been given to improving this class of fruit, because of their adaptability to cold sections, where only a few varieties of apples can be successfully grown. These efforts have been attended with marked success. Crab Apples succeed equally well in all sections, and are valuable for cider, preserves, jelly, pickles, and some of the improved sorts are excellent for eating.

***FLORENCE.** Fruit waxen, yellow and red, medium size, very handsome and good quality. Fine for jellies, preserves and pickles. Tree perfectly hardy; is an early and annual bearer. September.

HYSLOP. Large, dark red, sub-acid; bears its fruit in clusters; good eating and cooking; very hardy; very popular. When over-ripe becomes "floury." September.

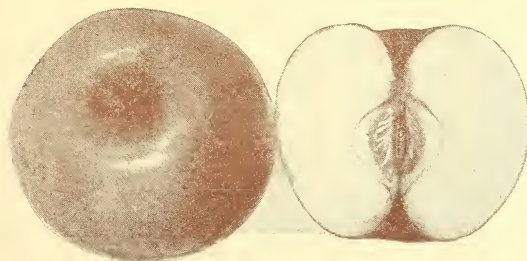
***LARGE RED** (Siberian). Large, pale red and yellow; good quality, large tree, with coarse foliage; early bearer, fruit much larger than the common Siberian.

SHIELDS. Originated in Wisconsin; tree is large, shapely, beautiful, perfectly hardy and a good bearer; fruit large; yellow striped and splashed with red. Splendid quality. Don't overlook this variety.

***TRANSCENDENT.** Yellow, striped with red; good eating; fine for preserving or pickling; good for cooking; makes good cider and jelly; immensely productive, very early bearer. Blights to death in eastern Nebraska. Adapted to North and West.

***WHITNEY.** One of the largest, glossy green, splashed with carmine; firm and juicy, best quality; an ironclad; a great bearer. Ripens in August. Makes a fine white cider. Fine for preserves and jellies.

***YELLOW SIBERIAN.** Medium size, good quality; tree hardy. Excellent for pickling.



Hyslop Crab



PEARS

PEAR growing, at one time, was considered a failure in Nebraska. With better knowledge of varieties and culture, pears are succeeding to such a degree that considerable commercial planting has been done in eastern Nebraska of recent years. We have faith in a carefully selected list of pears when properly cared for. Plant only two or three varieties; try to get well ripened growth, give only fair cultivation. Be content with an annual growth of from twelve to eighteen inches. Rank, late growth is often the cause of disease. Plant four or five inches deeper than stood in nursery, and twelve to eighteen feet apart.

The hardiest varieties marked with asterisk (*).

For planting, pruning and care. see page 3.

BARTLETT. Large size, with often a beautiful blush to the sun; buttery, very juicy and high flavored, bears early and abundantly. Very popular. Blights with us. August.

BIRKETT. A strong growing, beautiful tree; blight proof and hardy. Fruit medium in size and quality; a good bearer. Fine for canning and preserving.

***FLEMISH.** Large, red cheeked, beautiful, excellent quality, productive; one of the hardiest; very popular in the West.

***KIEFFER.** This pear was raised from seed of the Chinese Sand Pear, accidentally crossed with the Bartlett or some other kind grown near it. Tree has large, dark green glossy leaves, and is of itself very ornamental; an early and annual bearer; the fruit is showy, valuable for canning, and never rots at the core. Is nearly blight-proof. October and November.

SECKEL. Small, but of the highest flavor; a standard of excellence; a slow grower, but bears early. Ripens last of August. Productive.

SHELDON. Large, plump and round; russeted; is handsome and good; one of the most reliable for the Central West.

***LOUISE** (L. B. De Jersey). Rather large, green-yellow, with a bright red cheek; juicy, buttery and melting; excellent; very productive as dwarf only. August and September.

***ANGOULEME** (Duchess). Is very large, dull greenish yellow, streaked and spotted with russet. Flesh white, buttery and very juicy, rich, very excellent flavor. This variety and Louise, when grown as dwarfs, are more profitable than standard sorts. Bear at two years from planting. These varieties have borne eleven crops in fourteen years in our orchards.

DWARF PEAR TREES

The pear is one fruit that can be grown profitably as a dwarf tree. It differs from a standard tree in that it is grafted on a quince root. This retards its growth and makes a dwarf tree. This slower growth makes it more resistant to blight and other pear tree troubles than the standards, which grow more rapidly. It also causes the tree to bear earlier; some times producing fruit the second year, and often quite heavily the third and fourth years after planting. They may be planted much closer (8 to 12 feet apart) than the standards, which makes them very desirable for city planting and for a limited space on home grounds. The Louise and Angouleme are the best suited varieties for dwarfing. See descriptions of these varieties above. A few dwarf pear trees should be in every home orchard or garden in the Middle West.



CHERRIES

EVERY home owner whether in city, village or country, can plant cherries. Every housewife likes them for canning. They are one of the first fruits to ripen and one of the most resistant to insects and disease. Plant a few each year. Plant twelve to twenty feet apart. For planting, pruning and care, see page 4.

MAY DUKE. This is the most popular of all the Dukes and is doing well here. An upright, beautiful grower and bears well. Fruit large, oblate, dark red. Is not affected by the leaf rust so destructive in wet seasons. Sweeter than Richmond and Montmorency. Is fine to eat from the hand as well as for canning.

***Morello.** Medium to large; is blackish red; rich acid, juicy and good; very productive. This is an excellent late canning variety. Its color, both skin and flesh, is a black red which gives it a very rich appearance. It is better adapted to sections of medium to light rainfall than to the lower more moist parts of the Central West.

***MONTMORENCY.** Large, red, acid; larger than Early Richmond and ten days later; prolific and perfectly hardy and indispensable in the higher altitudes. Quality the very best. This variety is getting to be one of the popular home orchard sorts and is now the leading commercial variety in the Central West.

***RICHMOND.** Medium, red, fine when well ripened. Tree hardy and very productive. This variety has been widely planted and has given general satisfaction. Home planters are now planting these in equal numbers with Montmorency, thus extending the season to about four weeks.

WRAGG. Same as Morello.

COMPASS CHERRY-PLUM

This hardy northern fruit was originated in Minnesota and is a cross between the sand cherry of the plains and native wild plum. It will grow and thrive where extreme cold and semi-arid conditions prevail. It usually bears the second year from graft and often nursery trees are loaded down. The quality is much better than that of the sand cherry, having lost much of the astringency of this parent in hybridization.

The flesh is more firm than that of most native plums, making it valuable for preserving. It is also prized by many to eat from the hand. Every home, especially in the North and West should have some of these trees. They will abundantly bear fruit that will be thoroughly appreciated.



Compass Cherry



Waneta Plum

PLUMS

PLUMS are used for canning, sauce, butters, jelly, and eating from the hand. This fruit has been improved very rapidly in recent years. Varieties of highest quality only a few years ago have now been discarded for newer and better ones. We have been testing out in our trial grounds many new varieties of promise, and are pleased to state that we are now offering some varieties that are really worth while. We have discarded almost all of the pure Japanese and European sorts as they are only semi-hardy, and we now have hybrids with quality fully equal to these kinds and much hardier. Read the descriptions. Plant Plums ten to eighteen feet apart. Select more than one variety to insure proper fertilization of bloom. Plums are self sterile to quite an extent.

The hardier varieties marked with asterisk (*).

For planting, pruning and care, see page 4.

OMAHA. A valuable new plum, originated by the late Theodore Williams of Benson, Nebraska. Very large. The flavor is excellent; meat is solid and pit small. A favorite from the tree and one of the best canning plums grown. Its size, texture, and flavor resemble the Burbank, one of the leading California plums, and as a market plum it sells quite as readily. This variety is one that we will guarantee to please the most critical and its hardiness and productiveness in severe climates makes it very valuable. Perfectly hardy in Minnesota. Season medium.

***LARSON.** Originated by Mr. Larson of Washington County, Nebraska; grown from seed brought from Denmark. Fruit large; dull bluish red; handsome and of the best quality;

semi-freestone. The flavor is particularly pleasing making it a favorite for eating from the hand. Excellent for jelly and butter. Early ripening.

STELLA. This is one of the best of the creations of Mr. Williams for territory east of the Rocky Mountains. Stella is as beautiful as a plum can be, and one of the most dependable; large, glossy, coral red, almost proof against rot and insect attack. Excellent to eat from the hand and fine for canning, butter and jelly. The flavor is more mild than the pure American sorts.

***WOLF.** Large, dark red; good quality. Extra fine for jelly and canning. It is a vigorous grower, entirely hardy, and an abundant bearer; one of the very best pure American sorts.

Has given satisfaction in all parts of our territory. Season August.

***WYANT.** Large, round, oblong, purple-red, thick skin which peels readily; flesh firm; a perfect freestone and of excellent quality. Is very fine for jelly and butter and an excellent plum from the tree. Ripens in August. Has been our leading variety in northern Nebraska and South Dakota for a number of years.

LOMBARD. Large, greenish-blue, flesh yellowish-green; juicy and pleasant. A mild flavored, solid flesh plum. Fine for eating from the hand and for canning. Ripens in August; tree vigorous; one of the most widely cultivated plums of America. One of the best of the European sorts. Moderately hardy.

BOHEMIAN (Prune). An early continuous bearer. Fruit of medium size, prune shaped, blue, freestone; much better than German Prune. A fine canning and eating variety. The best prune for the Central West. Moderately hardy.

***HANSEN'S HYBRID PLUMS**

Professor N. E. Hansen of the South Dakota Experiment Station, one of the leading horticulturists of America and authority on horticulture in the Northwest, has been working for twenty-five years to develop hardy strains of fruit for



Sapa



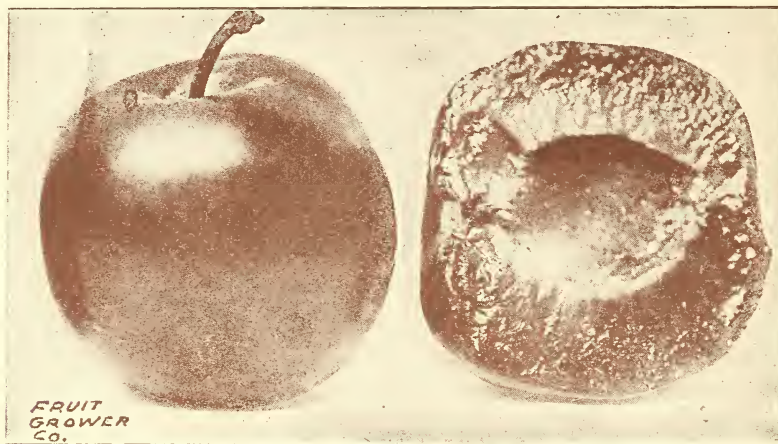
Omaha

the bleak prairies of the Northwest. The U. S. Government sent him to Siberia to find and bring back super-hardy trees and plants for the more rigorous sections of this country. Through his explorations, hybridization and selection, he has brought out numerous hardy varieties that are very valuable for the northwest plains. Among the most important and valuable are several varieties of plums, extra hardy and of superior quality. They are so good that they are replacing some of the leading high class varieties even in sections of the country where climate is not to be considered—where any varieties of plums are hardy. We have the best of these, and describe them below. Of all the varieties introduced, we find those listed below are the best. Plant a half dozen or a dozen on your home ground. You will be enthusiastic over their quality and bearing.

HANSKA. Hanska is Sioux Indian for "tall," alluding to the extremely rapid growth in nursery and orchard. Three-year old trees attain a height of twelve feet.

The female parent is a seedling of our wild northwestern plum (*Prunus Americana*); the male parent is the large, firm-fleshed, fragrant, apricot-plum of China (*Prunus Simoni*), popular in the orchards of California.

The fruit of this variety is much admired for its beautiful color, which is bright red, with heavy blue bloom, firm yellow flesh, good quality and rich fragrance. The fruit is one and one-half inches to one and nine-sixteenths inches in diameter, often larger. When cooked, the apricot flavor is brought out to perfection, entirely unlike any native plum. The flat shape also distinguishes it from all the other hardy plums in the Northwest.



Stella

The Hanska has been known to bear heavy crops when native plums were almost a total failure. Begins to bear at two years. Very small pit. Exceedingly hardy and vigorous.

WANETA. This is undoubtedly Professor Hansen's masterpiece in plums. It combines hardiness, immense size, delicious quality, long keeping, beautiful color, small pit, and early bearing, often producing a good crop in two years from planting. Following is Professor Hansen's own description of this variety: "This is the largest of all the Hansen Hybrid Plums. It is a 2-inch, 2-ounce plum, and of very strong growth in nursery. An early heavy and persistent annual bearer of delicious plums of immense size. It is a cross of the America, a large Japanese plum, with pollen of the Terry, the largest native plum. The Waneta combines in large measure the most desirable points of the native and the Japanese plums. In a visit to the 1920 Iowa State Fair at Des Moines, I noticed that Waneta and the sister variety Kahinta, were by far the largest plums on exhibition."

KAHINTA. Very much like the Waneta; very promising.

OPATA (Sioux Indian for "bouquet"). First to ripen. At blooming time it is a gigantic bouquet of pure white flowers of most exquisite fragrance. Blooming just a little later than the ordinary or American plum, and in this way escaping frost dangers. Again when the fruit is ripe combine the large leathery foliage and

the dark purplish-red fruit, with blue bloom, it is indeed a bouquet at that time. The Opata is a cross from the Dakota Sandy Cherry and the Gold Plum, originated by Luther Burbank, and for which \$3,000 was paid when first introduced. Tree is vigorous in growth, heading very low and of quite spreading habits, and we recommend that you allow it to grow rather in this form than in the regular high trunked trimmed, tree form. It forms fruit buds freely at one year old and bears without exception the next year. Color of flashy green, flavor very pleasant, combining the spicy acid of the Sand Cherry with the rich sweetness of the Gold Plum. Ripens with us about July 10th, and will hang on the trees in good condition for about two weeks. Generally free from rot, and almost immune from the sting of the Curculio.

SAPA (Sioux Indian for Black). The female parent is one of our selected seedlings of the western Sand Cherry, a favorite of the Sioux Indians; the male parent a very large, purple-fleshed Japanese Plum originated by Luther Burbank of California, and by him named the Sultan. An extremely early bearer; one-year old trees in nursery row have many fruit buds. Fruit medium, glossy dark purple skin; flesh rich, dark purplish-red, fine flavor. Sapa Plums raised at Brookings, South Dakota, were one and three-eighths inches in diameter, weight five-eighths ounce, on one-year old trees set the preceding year and bearing a heavy crop. Season very early. Should also be grown in bush form.

APRICOTS

THIS fruit is a close relative of the plum and peach, combining the qualities of both. The fruit ripens after the early cherries and just before plums and peaches. Tree is fully as hardy as the peach and requires about the same culture. It ships well and commands a good price in the markets, and for drying and canning, it has no superior. Russian varieties are the earliest and most hardy. Blooms early and are sometimes caught by frost.

ALEXANDER (Russian). Medium to small, light orange, yellow flecked with red; flesh tender, juicy, sweet and good quality; hardy; productive. July.

BUDD (Russian). Medium to large; light orange with blush on sunny side; flesh sweet, juicy, with flavor of the peach; hardy and productive. August.



PEACHES

THE north part of Nebraska is not a peach country, and it is only by painstaking care that we grow even a limited supply of the better class. The peach prefers a well drained loam. We recommend the following sorts, which we think hardy enough to stand without protection in the southern half of Nebraska. Please remember the "star" (*) sorts will do best in the greater part of the state.

For planting, pruning and care, see page 4.

ALEXANDER. Size medium to large, handsome and regular in form, with deep maroon shade, covered with the richest tint of crimson; fair in quality, with a vinous flavor; adheres to the stone; should remain on the tree until fully ripe. The earliest peach.

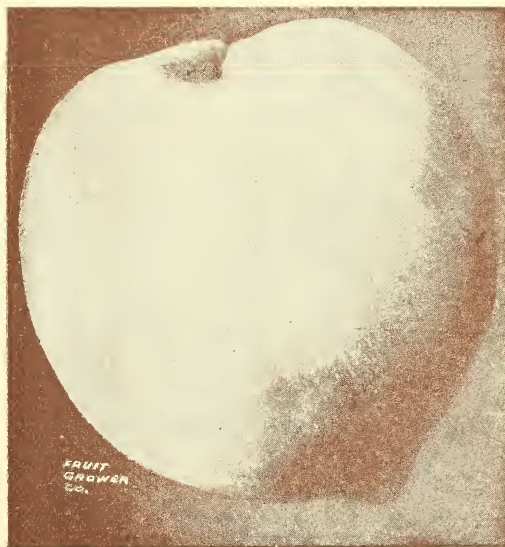
BAILEY. An Iowa seedling. Tree dwarfish, spreading willowy habit; peach is slightly below medium size, light yellow, splashed with red on sunny side, flesh white, best quality, small pit, profuse bearer; has proven to be much hardier than any of the old varieties. Season September.

***CHAMPION.** Originated in Illinois; fruit is large, beautiful in appearance; flavor delicious, sweet, rich and juicy; skin is creamy white, with red cheek, becoming quite red when ripe. Freestone; season last of August. Tree vigorous. One of the very hardiest and best varieties for Nebraska.

***CROSBY.** Medium, rich orange yellow, with blush; freestone, pit small, flesh yellow, juicy and sweet. Tree low, spreading, willowy habit of growth; perfectly hardy in a peach country. Season August.

***WHITFORD.** Originated by C. A. Whitford of Arlington, Neb., and is one of the best freestone peaches for Nebraska that we know of. A rich golden yellow, sometimes slightly flushed; quality rich and delicious; a reliable bearer and as hardy as Wright's or Bailey. Season September.

***WRIGHT.** Originated in Nebraska. Similar to Bailey. A good one for Nebraska. Season September.



Whitford



GRAPES

THE grape is at home in the West. In our deep soils, bright sun and dry atmosphere, it attains its highest perfection. There is scarcely a yard so small, either in city or country, that room for a dozen to fifty vines cannot be found, furnishing an abundance for family use. To grow grapes successfully, plant in well drained soil. Plant six to eight feet apart in rows six feet apart.

For planting, pruning and care see page 5.

BLACK GRAPES

***BETA.** This grape is extremely hardy and will stand without protection into North Dakota. It was introduced by Professor Green of Minnesota, and is becoming very popular throughout Minnesota and the Dakotas. The fruit is medium size, fair quality and a very heavy bearer. We recommend the Beta for the North where other grapes winter-kill—it will thrive and bear abundantly.

***CONCORD.** Bunches large, berries large, round; skin thick and covered with bloom; flesh juicy, sweet. Vine very hardy, vigorous and productive; at present the most popular of all our native sorts.

***MOORE.** A large, black grape of the Concord type, the entire crop ripening before the Concord; bunch medium, berries large with blue bloom; flesh pulpy and of good quality. Vine is hardy, moderately productive, better as it attains age. Planted extensively as a market sort.

WORDEN. This variety is a seedling of the Concord, which it greatly resembles in appearance and flavor, but the berries are larger, the fruit is better flavored and ripens several days earlier.



Beta Grape

CAMPBELL. Bunches medium to large, berries large, glossy, black with a beautiful blue bloom. Pulp sweet and juicy. Good. Seeds small and few in number. Season ten days earlier than Concord. New and promising.

RED GRAPES

AGAWAM. Vigorous grower; large, round, with rich, peculiar aromatic flavor; very desirable; should be covered in winter.

***BRIGHTON.** A cross between Concord and Diana Hamburg; bunches large, berries of medium size, flesh sweet, tender and of the highest quality; ripens early; dark red, when fully ripe almost purple. Healthy but should be laid down and covered with litter in late fall.

WHITE GRAPES

ELVIRA. A very strong, robust and healthy grower; very productive, hardy. Bunch and berries of medium size and very compact; quality medium. September.

***POCKLINGTON.** Is a seedling of the Concord; vine hardy, both in wood and foliage; strong grower; called a white grape, but the fruit is a golden yellow; clear, juicy and sweet to the center, with little or no pulp; bunches very large, sometimes shouldered; berries round, very large, and thickly set; quality, when fully ripe, sweet and richly flavored; perfectly hardy.



Concord

NIAGARA. Clusters large and handsome, compactly filled with large berries, having a thin but tough skin. When fully ripe they are a fine pale yellow, with a thin white bloom, and the foxy aroma of an earlier stage has almost disappeared; the flesh is slightly pulpy, tender, sweet and delightful. Vine is fairly vigorous and productive. Ripens with Concord.

JUNEBERRY

DWARF. Grows four to six feet high; bunches out from the ground like currants; resembles the common Servis or Juneberry in leaf and fruit, but the fruit is larger, and in color almost black; commences to bear the second year after transplanting, and bears profusely. No farm or garden should be without this most excellent dessert.

LANDSCAPE SERVICE

Read about our Landscaping Service on page 45 of this catalog.

Let Us Help You



Pocklington

GOOSEBERRIES

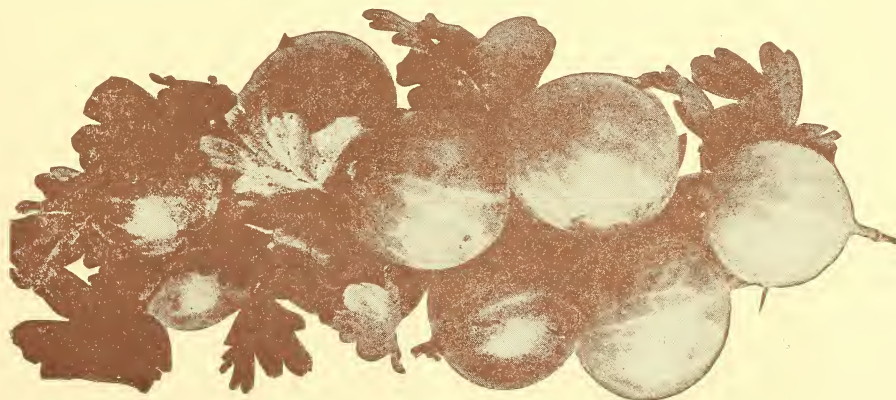
IN order to produce large, abundant crops of gooseberries it is necessary to manure heavily and prune closely; they require about the same location, treatment, etc., as the currant, except they will stand more sun. Plant four feet apart. See page 4 for "planting and care."

***CARRIE.** Originated in Minnesota. Fruit medium to large. A strong grower and very productive. Excellent quality. After the third year the bush loses its thorns. Hardy.

CHAMPION. Medium to large size; quality good; free from mildew; bush large and healthy; very productive.

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

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



Carrie



CURRENTS

THE value of Currants needs no rehearsing. We seldom see them missing from the well kept garden. Every one knows their value as a household necessity; nothing makes such jelly, with perhaps, the one exception, the crab, and even that must give way to the bright color produced by the Currant.

Where half-a-dozen currant bushes were once the extent of cultivation, we now see acres utilized to supply the demand of our cities. No one can afford to leave this well tried fruit out of their list for a complete collection.

Currants love a cool, deep soil, and a little shade. Among fruit trees or along the north side of a fence is a good place. No matter how good the soil, give good cultivation and plenty of manure. The following varieties will give good satisfaction.

For planting, pruning and care see page 4.

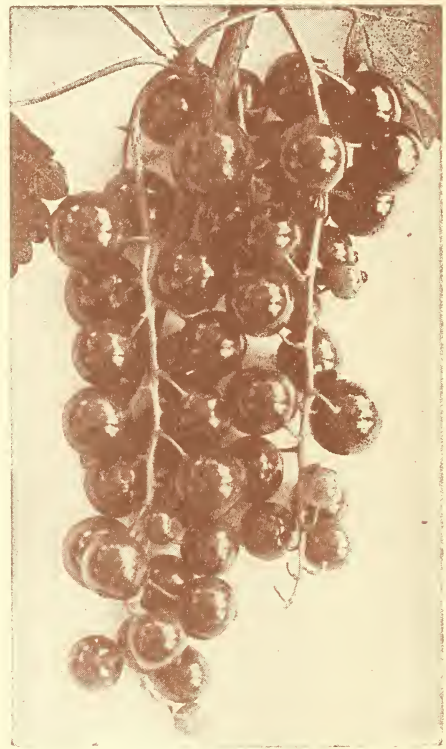
CHERRY. Well known; large, bright crimson, very acid; an old favorite; one of the largest currants.

***FAY.** Very prolific if properly cared for. It is a gross feeder, and requires liberal fertilization. It is healthy, vigorous and very productive; the bunches are long, and easily picked; commands a high price; berries large and hold their size well to the end of the bunch; bright red, of good flavor, and more acid than most varieties.

***NORTH STAR.** Both berry and bunch are very large; the fruit is superior, very sweet and rich in quality, firm; a very good market currant; desirable as a dessert fruit in the natural state, and unequalled for jelly.

VICTORIA. Large, bright red; bunches very long; late; very productive and valuable. This is a standard, very good and reliable currant, and will suit everybody.

***WHITE GRAPE.** Very large, white; this is the very best table variety of currants known; sweet or very mild acid; good grower, hardy, perfectly satisfactory in every respect, and a currant we most heartily recommend for any purpose.



North Star Currant

BLACKBERRIES

PLANT in rich soil and a little shade, among trees, or on north side of trees or fence, if possible. Of all varieties tested, the Snyder has proven the hardiest, and Stone's Hardy second. Plant three feet apart in rows six feet apart. For planting and culture see page 4.

STONE. It is a vigorous grower; berry glossy black and of good flavor; a little later than Snyder.

***SNYDER.** Medium in size, sweet and good, strong grower; very productive; extremely hardy; has fully proven its value. After all the experience we have had with blackberries, we are thoroughly convinced that this is the berry for the West and Northwest. Should be uni-

versally planted.

DEWBERRY (Lucretia). This is the finest of its class; one that has proven successful; a strong grower. It is really a new trailing blackberry, easily protected in winter. Set the plants two feet apart in the row; cover in winter with coarse litter and mulch the plants with it in the spring, thus keeping them off the ground.



Cumberland Raspberries

RASPBERRIES

THE raspberry is one of the most delicious and popular fruits grown. They are always in demand in season and command good prices on the markets. For canning purposes they are unexcelled. They are easily cultivated and require little care. Cut out the old and weak shoots each year; plant in good soils in hills about four feet apart. With a little care and attention they will produce large crops of berries. For planting and care see page 4. The following are best adapted to the West.

BLACK RASPBERRIES

***CUMBERLAND.** Berries very large and even in size; bears very abundantly; ripens between the Kansas and Gregg. Strong grower and one of the hardiest. The best all-around black Raspberry known.

GREGG. A good late black cap and popular variety. Canes of strong vigorous growth, and under good culture very productive; berries are large and of a fine flavor; it requires a good, strong soil to produce the best results; it is not entirely hardy, but suffers during unusually severe winters.

NEMAHA. The best late black cap. This fine berry originated in Nemaha County, Nebraska, a seedling of the Gregg, and is almost identical; fruit a little later and of better quality; and is hardier than the parent; thus a better berry for general planting.

***CARDINAL.** A very valuable cross between the red and the black. Thrifty and productive; quality good. It is by far the best of the cross-

es yet introduced. Fruit purple. Hardy. A good one.

RED RASPBERRIES

LOUDON. The hardiest and most productive of the red varieties; very large and of the best quality.

TURNER. A beautiful berry, of fine size and excellent quality; one of the hardiest and most reliable varieties known.

ST. REGIS (Everbearing). It bears the first season. Plants of the St. Regis put out in early part of April gave ripe berries on the 20th of June and continued to produce ripe fruit until late October.

We transplant our shade and street trees several times. It gives them the kind of roots that make transplanting easy.



STRAWBERRIES

THE strawberry has been styled the queen of fruits. It is the first to ripen and the quickest to come into bearing. Can be successfully grown on a great variety of soils; responds readily to kindly location and liberal feeding and culture. Every home builder who fails to have an abundance of this delicious health-giving fruit misses a chance of great things for little money. The strawberry prefers a cool, moist soil; good upland soil is the best, well enriched. Spring planting is best.

Of the hundreds of varieties that have been introduced we offer only a small number of the best, all of which will thrive under any ordinary care. Be sure to note (*) varieties, as we believe these two (Warfield and Dunlap), when planted together, will give the planter more real satisfaction and better value than any other two varieties of standards.

For planting and care see page 5.

BEDERWOOD. This has been well tested all over the country, and holds first place as a good fertilizer for most pistillates, and one of the best bearers of excellent fruit of good size and quality; will stand an unusual amount of drouth; commences ripening early and lasts a long time.

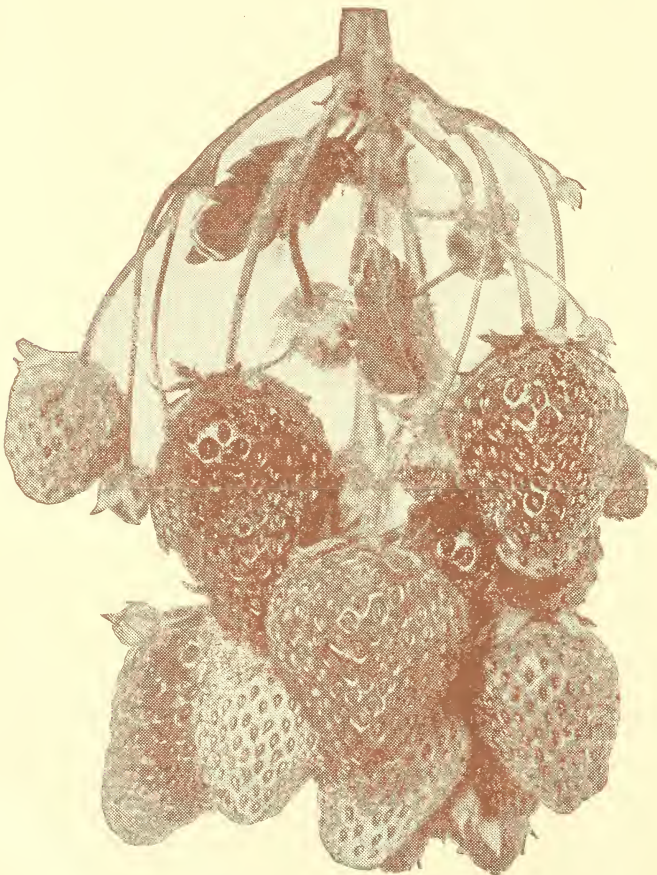
***DUNLAP.** Originated in Illinois and is of the Warfield type. One of the best all around varieties ever introduced; has a perfect blossom, is hardy and productive; is able to hold its own under any rough and tumble treatment, bringing every berry to maturity, and is the nearest perfect in every respect of any berry we know of. We believe it to be one of the greatest berries ever introduced.

***WARFIELD (Imp.)** We place this at the head of the list of valuable berries, excepting the Dunlap, because after being well tested over about every state in the Union it is considered one of the best berries grown, all things considered, that go to make a profitable berry. The Warfield, when planted with Dunlap as a fertilizer, will produce more good, marketable fruit on our grounds than any other we can now name.

EVERBEARING

Strawberries that yielded fruit continuously from May until frost have been known for a long time. The new cultivated sorts were originated by cross-pollinating these wild everbearing Alpine sorts with our standard varieties and combining the everbearing habits of the one parent and the size and quality of the other.

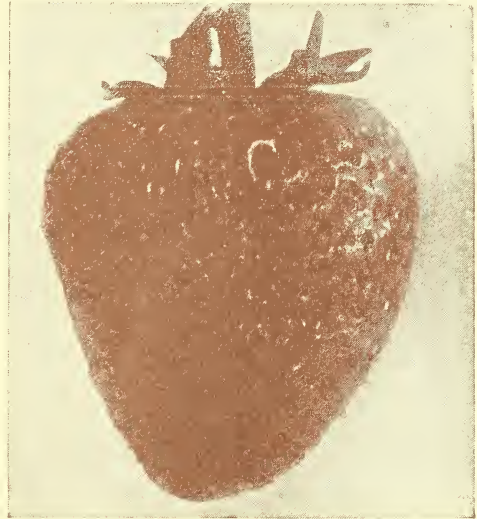
We have been testing the different varieties of everbearers for several years on our own grounds, and offer to our patrons only three varieties—the Americus, Superb and Progressive. We are recommending the Progressive only as it is superior in almost every respect to the other varieties.



Progressive



The Progressive, a hand pollinated cross between an everbearer and Senator Dunlap, is the climax of all everbearers. Earlier as a spring crop than any other berry; of better quality than any common variety; staminate, and almost as free a plant maker as its parent, the Dunlap. A persistent bearer from May to November. Fruit of fair size, resembling the Dunlap. New stolons are frequently in bloom before they have taken root. Its heaviest bearing records are under irrigation. "Our best Nebraska record without irrigation is: 100 plants set April 10 allowed to produce berries after July, produced 90 quarts to September 10, and were still averaging one quart per day. They require the same treatment as other berries, and, like other strawberries, respond liberally to good treatment."—G. S. Christy, ex-President Nebraska State Horticultural Society.



Dunlap

Asparagus

THIS much neglected vegetable is very easily grown and should find a place in every city and farm garden. Such immense quantities of it can be grown on a small space that no home owner can afford to be without it. This vegetable is rich in vitamins, which are so essential to health, and especially

to the development of children. The Asparagus roots should be planted in well-prepared beds, the soil of which has been enriched by liberal quantities of well rotted manure. For use it should be cut just at the top of the ground when it is from three to five inches high. This is one of the earliest of vegetables, the shoots coming out before the frost is hardly out of the ground.

CONOVER. Is the best for general planting, and is largely grown.

PALMETTO. Early; is a very reliable variety.



Conover Asparagus

Rhubarb

LINNAEUS. Early, tender and good; season long.

VICTORIA. Very large, long, tender stems.

A Small Investment Adds Great Value

Have you ever given careful consideration to the question of how much a few trees and shrubs would add to the value and beauty of your home?

An investment of \$15.00 to \$50.00 can be made to add from \$100.00 to \$500.00 to the selling value of a property. We can offer you plain practical suggestions as to how it can be done.



ORNAMENTAL DEPARTMENT



DECIDUOUS TREES

THE many ways in which Deciduous Trees are used make them among the most important productions of the modern nursery. There is growing constantly a deeper appreciation of trees, and more people know them and love them than ever before in the history of the country. Greater attention than ever is being paid to the trees along the city's streets, and it is well recognized that shade and shelter trees around the farm home not only add to its beauty and comfort, but greatly increase the value of the property.

The trees we offer in the following list are all thrifty, vigorous specimens which have, by cultivation, been encouraged to grow great quantities of fibrous roots, so essential to successful transplanting.

For planting and care see page 5.

***ASH, American White** (*Fraxinus Americana*). A medium grower and valuable for planting in the streets or in parks; may be extensively planted for timber.

BIRCH, Cut-Leaved Weeping (*Betula pendula laciniata*). See Weeping Trees.

BOX ELDER (*Acer Negundo*). A rapid growing variety, with light green foliage and spreading head; a free grower; used for shade and windbreak; very hardy and easily transplanted.

CATALPA, Western (*Catalpa Speciosa*). Valuable for timber, fence posts, etc. Ornamental and valuable tree where hardy.

CATALPA, Umbrella (*Catalpa Bungei*). Foliage large and glossy. Top-grafted on tall stems it forms a perfect umbrella shaped head and makes an effective tree for formal planting.

CHERRY, Wild Black (*Prunus Serotina*). An upright, round, headed, strong growing tree; slender, glossy leaves, hardy.

CHESTNUT, American Sweet (*Castanea Americana*). Our native species; smaller than the Spanish, but sweeter; moderately hardy.

***ELM, White** (*Ulmus Americana*). A noble spreading and drooping tree suitable for shade and excellent for streets and drives.

ELM, Camperdown Weeping (*Ulmus Montana Camperdown pendula*). See Weeping Trees.

***HACKBERRY** (*Celtis Occidentalis*). Resembles Elm somewhat, foliage more pointed and a bright glossy green, bark thick and rough; a symmetrical grower; good street tree, drouth resistant.



Northwest View of Marshalls Nurseries

HORSE CHESTNUT, European (*Aesculus Hippocastanum*). Similar to the American Buckeye; forms a round, shapely head; very dense and beautiful; moderately hardy.

LILAC, Japanese Tree (*Syringa Japonica*). A fine small tree. Matures to a height of from 20 to 30 feet. Immense spikes of grayish blossoms.

LINDEN, American (*Tilia Americana*). A rapid growing, large sized tree with a remarkably straight trunk; deep green, heart shaped leaves, and clusters of fragrant yellow flowers. Is splendid for lawn and street planting.

***MAPLE, Soft** (*Acer Dasycarpum*). Silver leaved Maple and should not be confused with Silver Poplar. Rapid grower. A favorite lawn and street tree.

MAPLE, Norway (*Acer Platanoides*). This tree is proving to be one of the best of the hardwood trees for the West. It closely resembles the Hard or Sugar Maple in appearance. It is very symmetrical with a round, dense head and dark green foliage. Makes a beautiful shade or street tree. It grows somewhat slower than the Soft Maple, but is sturdy and the limbs are not so easily broken by the wind.

MAPLE, Hard or Sugar (*Acer Saccharium*). A beautiful, stately tree. A desirable shade tree where it does well.

***MOUNTAIN ASH, European** (*Sorbus Aucuparia*). A round headed tree, 20 to 30 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 tree is 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 remain long after the frost has denuded it.

MULBERRY, Russian (*Morus Tartarica*). Valuable for hedges and windbreaks around orchards and fruit plantations, as it bears every year, ripening constantly nearly all summer, thus feeding the birds. Makes a rapid growth and is considered very good for posts.

MULBERRY, Tea's Weeping (*Morus Tartarica Pendula*). See Weeping Trees.

***OLIVE, Russian** (*Elaeagnus Argentea*). An ornamental tree of special value; attains a height of 30 feet or more; bark and leaves light green when young; bark becomes darker as the tree grows older, and the leaves more silvery white; it blooms profusely in June in small racemes. An excellent tree for semi-arid districts.

OAK, Pin (*Quercus Palustris*). One of the most beautiful street and lawn trees grown; of rapid growth, and transplants much easier than the Burr Oak; perfectly hardy.

***POPLAR, Norway** (*Populus Certinensis*). Is being planted extensively. Resembles Carolina Poplar, but attains larger size, and grows more rapidly. Planted for street, screens and shelters where quick effect is desired.

POPLAR, Canadian (*Populus Canadian*). 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. It is more desirable than the Cottonwood because it does not shed cotton, and is more shapely in its form and general growth.

POPLAR, Carolina (*Populus Monolifera*). Of good form and robust growth, and desirable where a very large tree is required.

***POPLAR, Volga** (*Populus Volga Pyramidalis*). A new, hardy poplar from Russia. The tree is an upright grower similar to the Lombardy Poplar, and better adapted to the West.



Trees Shrubs and Plants



A unique and conspicuous tree on account of its erect columnar form. Approximate limb spread six to eight feet, height twenty to thirty feet. An extremely rapid growth; excellent for screening undesirable views without taking up much space.

POPLAR, Bolle's Silver (*Populus Alba Pyramidalis*). Leaves are similar to Silver Poplar and habit of growth similar to Volga Poplar.

***POPLAR, Silver Leaved** (*Populus Alba*). Leaves are dark on upper side, and pure white on lower side. Rapid grower. Sometimes incorrectly called Silver Maple.

SYCAMORE (*Platanus Occidentalis*). Also called American Plane or Buttonwood. Well adapted for streets in cities where gas and smoke are injurious to foliage; upright, shapely and beautiful.

WALNUT, Black (*Juglans Nigra*). A moderate grower, perfectly hardy, producing a large nut.

***WILLOW, Golden** (*Salix Vitellina Aurea*). A handsome Willow with golden yellow bark which gives an excellent winter effect. Quick grower; very hardy; excellent for screening purposes.



Russian Olive

***WILLOW, Laurel Leaf** (*Salix Pendantra*). More like a large shrub of compact habit. The foliage is an excellent dark glossy green.

WEeping TREES

***BIRCH, Cut Leaf Weeping** (*Betula Pendula Laciniata*). An elegant erect tree with slender drooping branches and fine cut leaves. White bark.

***ELM, Camperdown Weeping** (*Ulmus Montana Camperdown Pendula*). Its vigorous irregular branches, which have a uniform weeping habit, overlap so regularly that a compact roof-like head is formed.

MULBERRY, Tea's Weeping (*Morus Tartarica Pendula*). A graceful and beautiful hardy tree, forming a perfect umbrella-shaped head, with long, slender, willowy branches, drooping to the ground and gracefully swaying in the wind; foliage small, lobed and of a delightful, fresh, glossy green. The tree is exceedingly hardy, of rapid growth and abundant foliage, and can be trained into almost any shape.

MOUNTAIN ASH, Weeping (*Sorbus Aucuparia Pendula*). A beautiful tree; straggling, weeping branches; makes a fine tree for the lawn; suitable for covering arbors; hardy.

WILLOW, Wisconsin Weeping (*Salix Wisconsin*). Very graceful drooping willow.

***WILLOW, Nioba Weeping** (*Salix Niobe*). Resembles the golden Willow in color of bark, a pretty golden-yellow, making an excellent summer and winter effect. Branches are slen-



Cut Leaf Weeping Birch

der, long and well drooping, growing to the ground in a short time. Leaves are a whitish-green. Very vigorous grower and perfectly hardy even in the Dakotas.

AVENUE TREES

- | | |
|----------|---------------------|
| Ash | Norway Maple |
| Elm | Sugar Maple |
| Sycamore | Silver Maple (Soft) |
| Pin Oak | Poplar |

TREES THAT COLOR IN THE FALL

- | | |
|--------|-------|
| Ash | Oak |
| Maples | Sumac |

TREES THAT FLOWER

- | | |
|---------|----------------|
| Catalpa | Horse Chestnut |
| Linden | Crab Apple |

ODD AND CONSPICUOUS

- | | |
|-----------------|------------------|
| Weeping Birch | Weeping Mulberry |
| Catalpa Bungei | Weeping Willow |
| Kentucky Coffee | |

TREES FOR QUICK EFFECT

- | | |
|---------------------|----------|
| Ash | Poplar |
| Catalpa | Sycamore |
| Silver Maple (Soft) | Willow |
| Russian Mulberry | |

FOR LOW OR MOIST SOILS

- | | |
|-------|----------|
| Ash | Poplar |
| Maple | Willow |
| Birch | Elm |
| Oak | Sycamore |



weeping Mulberry

SHELTER BELT PLANTING

THERE are many places throughout the Northwest where belt planting of trees is very desirable, to afford protection to the home orchard, farm and yard. Such plantings will also furnish fire wood—a point in many instances worthy of consideration. 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.

For dry soils and on the Western prairies plant a good proportion of Ash. It is not only the hardest 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 hardness but not of so much use for timber. In moist soils the Soft Maple is a good tree, especially valuable for firewood. On the dry Western prairies the Laurel Leafed Willow is the most popular. Its broad, thick, shiny leaves seem to be specially fitted to endure dry air. The Russian Golden Willow is also very popular. It branches profusely, making a denser shelter than any other tree. But the Norway Poplar is the tree that leads them all in rapid upward growth and saw log qualities. Russian Olive is rather slow in growth but is very hardy and makes an excellent low windbreak.

Two rows of evergreens properly arranged will shut out the wind better than six rows of other trees. This is especially true in winter when the windbreak is needed most. Jack Pine is the fastest growing evergreen, and makes a windbreak quickly, while Bull, Scotch and Austrian Pines all grow quite rapidly. Jack and Bull Pines will grow and thrive in the most severe locations, as well as Black Hills and Colorado Spruce, which are slower in growth. Scotch and Austrian Pine will thrive over the greater part of Nebraska and eastern South Dakota. These will make an average growth of 2 ft. a year if given good care.

Two rows of evergreens properly arranged will shut out the wind better than six rows of other trees. This is especially true in winter when the windbreak is needed most. Jack Pine is the fastest growing evergreen, and makes a windbreak quickly, while Bull, Scotch and Austrian Pines all grow quite rapidly. Jack and Bull Pines will grow and thrive in the most severe locations, as well as Black Hills and Colorado Spruce, which are slower in growth. Scotch and Austrian Pine will thrive over the greater part of Nebraska and eastern South Dakota. These will make an average growth of 2 ft. a year if given good care.



Pine Windbreak on Nursery

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.

Evergreens are also very valuable for windbreaks. One or two rows about the building site will cut off the winds almost completely and move your home a considerable distance south by making it warmer in fact, and by suggestions of warmth from their green color when everything else about the home appears dull and cold. For planting and care see page 6.

ABIES—THE FIRS

Trees are generally pyramidal in shape and hardy almost everywhere. The needles are short and generally bright on the under side. They transplant kindly and should be more generally used. They are nearly all native of the northern country and more handsome in cultivation than in their native soil.

A. BALSAMEA. Balsam Fir. A very regular symmetrical tree. Hardy in eastern Nebraska.

A. CONCOLOR. Silver Fir. A very beautiful species; leaves long and beautifully silvered; equal in color and beauty to the Colorado Blue Spruce. Hardy in eastern Nebraska.



Black Hills Spruce

JUNIPERUS—CEDAR

J. SCOPULORUM. Colorado Silver Cedar. This variety is midway between our native Cedar and the Irish Juniper in form, but far more silvery than either.

J. VIRGINIANA. Red Cedar. Hardy; rugged; native. Will stand more rough and tumble care than any other Evergreen, but we consider it a dangerous tree around an orchard, or in the neighborhood where there are orchards on account of the fungus, which is called Cedar Rust, which develops on the cedar trees and not only kills the cedar itself, but is very destructive to the foliage of the apple and some of our best roses and ornamentals; also some deciduous trees.

J. PROSTRATE. Prostrate Juniper. A native of the Black Hills; new and novel. Creeping evergreen that attains no height whatever in body, but creeps vine-like. Is very desirable for covering walls or terraced mounds on the lawns or landscape; also fine for edging or grave cover in cemeteries; stands trimming well and is very hardy.

J. SABINA. Savin's Juniper. One of the best. Spreading fan shape habit, of pleasing color of dark green. Stands the city dust, soot, etc., exceptionally well. Hardy.

PICEA—SPRUCE

These are all easy to transplant, and the most popular of the evergreen family. They are perfectly hardy and grow rapidly and are pyramidal in shape, used for specimens, in groups or for foundation adornment, and as screens, windbreaks or hedges they are equally appropriate. Needles are uniformly short. We have a fine stock of specimen plants that will please every purchaser.

P. EXCELSA. Norway Spruce. A lofty elegant tree, of perfect pyramidal habit; remarkably elegant and rich; and as it gets age, has fine, graceful, pendulous branches. It is exceedingly picturesque and beautiful. Fine for windbreak. Fast grower. Hardy in eastern Nebraska.

P. ALBA. White Spruce. A tall tree, with compact branches and light green foliage; hardy;

***P. CANADENSIS.** Black Hills Spruce. Compact, shapely and of deep green color. As the name would imply, it is a native of the Black Hills, hence naturally adapted to dry weather



and high altitudes. It is one of the very best for Nebraska and South Dakota. Transplants easily and stands severe climatic conditions. We take pleasure in recommending this ever-green.

***P. PUNGENS.** Colorado Blue Spruce. This species has been tested at various points on the prairies of the West and Northwest with perfect success. This is not only one of the hardiest, but the most beautiful in color and outline; foliage of a rich blue or sage color. It is a valuable acquisition.

PINUS—PINES

Pines seem to grow anywhere, high or low ground, exposed or shaded positions, in rich or poor soils, they are at home. After established they grow rapidly and when given space quickly raise their heads and spread their great branches, soon making a wonderful tree. The needles are invariably long and with age droop gracefully. Plant any kind and be assured of getting quick results.

***P. AUSTRIACA.** Austrian or Black Pine. A native of the mountains of Syria; a rapid growing species, with long, stiff dark green leaves; very hardy; does well on the high prairies.

***P. BANKSIANA.** Jack Pine. The most northern and easiest transplanted of all American pines; withstands drouth and hardships better than any other; of rather irregular growth; foliage bright green, needles short and stiff. Valuable for groves and windbreaks. A row of these on outside of protected area with a row of Black Hill Spruce ten feet inside, make a fine combination. The Jack Pines get up quickly for effect, and the symmetrical spruce give the ornamental effect desired.

***P. PONDEROSA.** Bull Pine. A native of the West. The best tree for the semi-arid region. Thrives in most any soil. Resembles the Austrian Pine. Extensively planted in West for windbreak.

P. SYLVESTRIS. Scotch Pine. A native of the British Islands; very rapid in growth; a dark, tall evergreen, with a bluish foliage and rugged shoots; hardy, and grows well even in the poorest soils.



Winter Evergreen Scene at Home of G. A. Marshall on the Nursery



Pine

P. STROBUS. White Pine. The most ornamental of all our native pines; foliage light, delicate or silvery green; flourishes in the poorest soils. Not hardy on prairies.

P. MUGHO. Dwarf Mountain Pine. This is the most beautiful of all dwarf pines. It forms a low top with ascending branches, and the breadth of the tree is frequently double its height. Foliage bright green. A valuable tree for ornamental planting.

THUYA—ARBOR-VITAE

This group contains a variety of forms of lower-growing evergreens. Pyramidal or globe shapes may be had and are popular for foundations, groups, hedges, cemeteries, vases and window boxes. Should be sheared occasionally so as to develop new growth to cover the inside branches that become bare in a few years if left untrimmed. Hardy only in extreme eastern Nebraska and East and Northeast. Will not stand hot, dry conditions.

T. GLOBOSA. Globe Arbor-Vitae. A perfect globe when well grown, the spread usually equalling the height. Foliage of light green.

T. OCCIDENTALIS. American Arbor-Vitae. One of the most popular. These grow very kindly, will stand shearing like a hedge, being conical in habit and growth.

T. ORIENTALIS. Oriental Arbor-Vitae. A striking color, pyramidal in shape and different from any of the others of this group. More hardy than the American varieties in the West.



Home of C. G. Marshall, April, 1920

ORNAMENTAL SHRUBS

PEOPLE, generally, are appreciating more the permanent value and beauty of shrubs. The charm and grace they lend to home grounds is invaluable, and, if judicious selection is made, it is possible to have a continuous succession of bloom from early in April to the days when the frost again nips the flowers of the very latest to bloom.

In many cases it would be better to plant shrubs in groups of several to one side of the lawn instead of following the method of planting one in a certain place and spoiling the effect of the open lawn. In most cases, three, six, eight, or twelve of one variety should be used in a particular grouping. Several such groupings make an excellent border or foundation planting.

For planting, pruning and care see page 6.

AMYGDALUS NANA. Double Flowering Almond. Pink double flower. Also have variety white flower. One of grandmother's shrubs. Blooms early in the spring. Used for cutting. Height 3 to 5 feet.

***BERBERRIS THUNBERGII.** Japanese Barberry. A pretty dwarf species that will fit into almost any planting and will grow in most any place. Handsome foliage of bright green oval shaped leaves which turn to the most brilliant shades of coppery red and orange in autumn and which remain on until late fall. The slender, graceful little branches are lined with small scarlet berries which hang until well into winter and help give life to the shrubby border, especially when there is snow on the ground. Used for foundation and group plantings and hedges. (Does not harbor wheat rust.) Height 2 to 3 feet.

BUDDLEIA. Butterfly Bush. So named because blooms attract large numbers of butterflies. This fact makes the shrub very interesting, especially to children. Matures first year and dies down like a peony. Blooms profusely, lilac colored tapering panicles, 6 to 10 inches long. Height 3 to 4 feet.

***CARAGANA ARBORESCENS.** Siberian Pea Tree. A shrub or low tree. Yellow pea-like flowers in May. Very hardy even in Dakotas. Height 8 to 10 feet.

***CORNUS SIBERICA.** Red-Twiggled Dogwood. Good for border groupings, where the smooth, slender, bright red branches in winter make a very pleasing contrast with evergreens and snow. Small white blossoms early in summer. Good foliage. Thrives in shade. Height 6 to 8 feet.

***CORNUS STOLONIFERA.** Red Osier Dogwood. Similar to Cornus Siberica although twigs do not color so well, but foliage has better autumn color. Height 6 to 8 feet.

CORNUS FLAVIRAMEA. Yellow-Twiggled Dogwood. Variety of Cornus Stolonifera, similar excepting twigs are a bright yellow in winter. Height 4 to 6 feet.

DEUTZIA GRACILIS. Dwarf Deutzia. Dense little bush, rarely over two feet high; blooms in May, pure white flowers. Height 1 to 2 feet.

DEUTZIA, Pride of Rochester. Pink Deutzia. Produces large double white flowers tinged with rose. Blooms in May. Semi-hardy. Height 4 to 6 feet.



Home of C. G. Marshall, May, 1922

CYDONIA JAPONICA. Japanese Quince. Hardy and very interesting shrub. Has a beautiful scarlet and sweet-scented flower very early in spring.

DIERVILLA ROSEA. Pink Weigela. Flowers in June, pink, trumpet-shaped, and measure probably $\frac{3}{4}$ inch across. Height 3 to 5 feet.

DIERVILLA EVA RATKE. Red Weigela. Same as Rosea excepting of more upright growth and bloom brilliant crimson. Height 3 to 5 feet.

***FORSYTHIA SUSPENS.** Golden Bell. With drooping or weeping branches. Yellow flowers in May before leaves appear. Good foliage. Height 6 to 8 feet.

***FORSYTHIA INTERMEDIA.** Upright Forsythia. Similar to Forsythia Suspensa except growth is upright. Height 6 to 8 feet.

***HYDRANGEA, Paniculata Grandiflora.** Large Flowering Hydrangea. An excellent flowering shrub. Small white flowers borne in large pyramidal shaped clusters during July and August, when few other shrubs are in bloom, later turning to rich shades of pink and coppery red. Good for cutting. Height 3 to 5 feet.

HYDRANGEA, Arborescens Grandiflora Alba. Hills of Snow. Sometimes called Snowball Hydrangea. Starts blooming in June and continues until frost. Flowers rather round clusters instead of pyramidal. Excellent foliage. Grows best on north and east sides of buildings where protected against afternoon sun. Height 2 to 4 feet.

***JUNIPERUS PROSTRATA.** Prostrate Juniper. An evergreen, shrubby and vine-like. Very desirable for covering walls or terraced mounds. Fine for graves. Hardy.

***LIGUSTRUM AMURENSE**—Amoor River Privet. This is the Russian variety. Hardest

Privet. Excellent green foliage, upright habit of growth; suitable for lawn hedges. Easily trimmed. Height 3 to 5 feet.

LIGUSTRUM REGELIANUM. Fern-leaf Privet. Handsome shining foliage and horizontally spreading branches. Used for foundation and lawn borders. Height 3 to 5 feet.

***LONICERA BELLA ALBIDA.** Bella Honey-suckle Bush. Very good foliage. Quick grower. Plant in groups. Excellent for screening. By planting in double or triple rows, shrubs 5 feet apart and alternated, makes good group for screening. Height 6 to 8 feet.

***LONICERA TARTARICA.** Bush Honey-suckle. Similar to Lonicera Bella Albida, only



Hydrangea P. G.



Home of Vernon Marshall, April, 1920

does not grow so fast, but this variety has blooms in June that are very pretty. Three colors, red, white and pink. Height 5 to 8 feet.

***LONICERA MORROWI.** Morrow's Bush Honeysuckle. Spreading. Small pure white flowers in June, followed by very showy fruits. Excellent foliage and used considerable in landscape groupings. Height 4 to 6 feet.

***PHILADELPHUS GRANDIFLORA.** Large Flowering Mock Orange. Incorrectly called "Syringa." Very hardy. Large handsome foliage, beautiful large white flowers in June; used for cutting. Height 8 to 12 feet.

***PHILADELPHUS CORONARIUS.** Fragrant Mock Orange. Similar to Philadelphia Grandiflora, flowers not so large, but fragrant. Height 6 to 10 feet.

***PHILADELPHUS MONT BLANC.** Foliage same light green as the other Philadelphia but not so large. Also flowers are smaller. Compact grower and used for variety where a medium sized shrub is needed. Height 4 to 6 feet.

***PRUNUS, HANSEN'S.** Hansen's Purple Leaf Plum. Grows in bush form 8 to 12 feet high. Used for color contrast. Hardy.

***PRUNUS TRILOBA.** Double Flowering Plum. A charming shrub or small tree. Blooms profusely, light pink double flowers early in spring before leaves appear. Height 4 to 6 feet.

***RHAMNUS.** Buckthorn. Robust hardy shrub. Pretty dark green foliage. Used some for ornamental hedges. When not trimmed grows 8 to 12 feet high.

RHUS GLABRA. Common Sumac. Used where natural groupings are desired. Height 5 to 8 feet.

***RHUS GLABRA LACINIATA.** Lace-leaf Sumac. Deeply cut, lace-like green foliage which turns to a rich crimson in autumn. Showy spikes of crimson fruits. Plant in groups to side of lawn. 4 to 8 feet.

***RHUS TYPHINA.** Staghorn Sumac. Foliage similar to common Sumac except larger. The new growth of the smaller branches is clothed with a peculiar down, giving an appearance similar to the growing horn of a deer. Used for groupings. Height 8 to 12 feet.

***RHUS THYPHINA LACINIATA.** Fern-leaf Staghorn Sumac. Lace-leaf variety of Rhus Typhina.

RHUS COTINUS. Smoke Tree. Called Purple Fringe by many people. Much admired for its curious fringe or hair-like flowers that cover the surface of the whole plant in midsummer. Height 8 to 12 feet.



Philadelphia



Home of Vernon Marshall, May, 1922

***SAMBUCUS CANADENSIS.** Common Elderberry. Good for parks, roadsides, etc., where a natural effect is desired. Berries useful for pies. Rapid grower. Blooms broad, white, in June, followed by reddish-purple berries. Height 6 to 10 feet.

***SAMBUCUS LACINIATA.** Cut-Leaved Elder. Similar to *Sambucus Canadensis* except foliage is cut-leaved. Used in groupings for contrast of foliage. Height 6 to 10 feet.

***SAMBUCUS, NIGRA, AUREA.** Golden Elder. Similar to *Sambucus Canadensis* except foliage is a striking golden yellow. Very good for color contrast. Height 6 to 10 feet.

***SPIREA VAN HOUTTI.** St. Peter's Wreath. Commonly called Bridal Wreath, but is an improvement of this variety. Used for foundation and border groupings and for hedges. Flowers pure white in May and early June. Every ground should have several. Height 3 to 6 feet.

***SPIREA ANTHONY WATERER.** Dwarf Pink Spirea. Produces flowers of a bright crimson and blooms so freely that it may be kept in flower throughout the summer until late fall by trimming away the dead blooms. Flower clusters are about 3 to 6 inches wide. The foliage is handsome, being variegated with creamy white or yellow, and sometimes tinted with pink. Used for low hedges along walks and drives. For lawn or foundation groupings. Height 1½ to 2 feet.

***SPIREA FROEBELI.** Froebel's Spirea. Similar to Spirea A. W. Grows a trifle higher. Very good. Height 2 to 4 feet.

***SPIREA CALLOSA ALBA.** Dwarf White Spirea. Similar to Spirea A. W. only blooms white. Foliage not variegated. Height 1 to 2 feet.

***SPIREA THUNBERGI.** Snow Garland. Flowers white and small and one of the first to bloom. April and May. Leaves very small which makes it useful for contrast. Used in foundations and border groupings. Height 2 to 4 feet.

SPIREA ARGUTA. Early Blooming Spirea. Similar to Spirea Thunbergi; foliage not as fine. Blooms earlier.

***SPIREA OPULIFOLIA AUREA.** Golden Leaf Spirea. Also called Golden Ninebark. A large, vigorous growing shrub that bears an abundance of fragrant white flowers in flat clusters in June. Followed by interesting seed pods. Foliage golden tinted. Height 4 to 8 feet.

SPIREA BILLARDI. Billard's Spirea. Sparsely twigged, erect branches, crowned with fluffy pale pink spike flowers. Blooms nearly all summer. Used in groupings. Height 3 to 5 feet.

***SYMPHORICARPUS VULGARIS.** Coralberry. Small, low growing shrub of very pretty habit; slightly drooping, flowers very small, fruit purplish-red and hangs on all winter. Foliage excellent green throughout the season. Thrives both in sun and shade, and one of the best low shrubs to plant close to trees. Height 1½ to 2 feet.

***SYMPHORICARPUS RACEMOSUS.** Snowberry. Same habit of growth as *Symph. Vulgaris*. Fruit pure white and profuse, the size of marbles.

***ROSA RUBRIFOLIA.** Reddish-purple leaves used for color effect with shrub groupings. Single roses followed by attractive red fruit. Very hardy. Height 3 to 5 feet.

***SYRINGA VULGARIS.** Common Purple Lilac. Well known Lilac. Height 6 to 8 feet.

***SYRINGA VULGARIS ALBA.** White Lilac. Common White Lilac.

***SYRINGA PERSICA.** Persian Lilac. Most popular lilac, bloom similar to common purple. Foliage smaller and not so dense, but shrub is almost sure to bloom next year after planted. Does not sprout like the common lilac. Height 5 to 8 feet.

***SYRINGA JAPONICA.** Japanese Tree Lilac. This is a small tree which grows 20 to 30 feet high. Immense spikes of grayish blossoms. Good grower. Hardy.



Home of G. A. Marshall, April, 1920

***SYRINGA JOSIKAEA.** Hungarian Lilac. A distinct type with dark green leaves. The deep purple buds, arranged in loose panicles, open into light violet-colored flowers. Height 6 to 10 feet.

***SYRINGA VILLOSA.** Late blooming lilac. Flowers large, light purple in bud, white when open, fragrant. Does not grow high. Height 5 to 8 feet.

NAMED FRENCH VARIETIES OF LILACS

Alphonse La Vallee—Double, blue shaded violet.

Chas. X. Single, reddish purple, large.

Frau Bertha Damman. Single, pure white.

Ludwig Spaeth. Single, dark purple, fine.

Madam Abel Chatenay. Double white.

Madam Lemoyne. Double, pure white.

Michael Buckner. Double, pale lilac.

Rubra De Marley. Single, reddish purple, fine.

***TAMARIX HISPIDA AESTIVALIS.** Tamarix. Tall shrub of upright growth with small leaves somewhat resembling Asparagus. Flowers are of a delicate pink or red fringe. Very useful for a tall screen of shrubbery. Height 8 to 15 feet. Can be kept any height.

***VIBURNUM OPULUS STERILS.** Snowball. The old fashioned Snowball that grows most anywhere and flowers so abundantly in the latter part of May. Excellent foliage. Height 6 to 10 feet.

***VIBURNUM LANTANA.** Wayfaring Tree Valuable for lawn borders. Soft, heavy, leathery leaves, which hang until late in fall. White flowers in May, succeeded by red berries. Height 6 to 12 feet.

***VIBURNUM OPULUS.** High Bush Cranberry. Foliage and flower similar to common Snowball. Used for its pretty leathery, rich green leaves and bright red berries which hang until long after frost. Height 6 to 10 feet.

***YUCCA FILAMENTOSA.** Adam's Needle. Planted for its evergreen foliage and its straight upright effect, which is quite a contrast with other shrubbery. Grows 1½ to 2 feet high with a long flower stalk appearing in

spring, which grows 2 to 3 feet high and is covered with large, whitish bell-shaped flowers in July.

ROSA RUGOSA. Japanese Rose. Bright, luxuriant, glossy foliage. Beautiful large single light red or white flowers, succeeded by large berries of a rich, rosy red color, and a great addition to the ornamental character of the plant. Used in foundation and lawn groupings and for hedges. Hardy and used so much in groupings that we have placed it in the shrub list. Height 3 to 5 feet.

SHRUBS FOR SHADY LOCATIONS

Barberry Thunbergii	Ligustrum
Cornus	Lonicera
Deutzia	Rhus
Forsythia	Symphoricarpus
Hydrangea A. G. A.	

SHRUBS AND PERENNIALS FOR GRAVES

Yucca	Dielytra
Juniper Prostrata	Gaillardia
Spirea V. H.	Iris
Spirea Froebelii	Lilium Tigrinum
Rosa Rugosa	Paeonia
	Phlox

SHRUBS FOR LOW FOUNDATIONS

Berberis Thunbergii	Ligustrum Regal
Diervilla	Symphoricarpus
Hydrangea	Rosa Rugosa
Spirea	

SHRUBS FOR HIGH FOUNDATIONS

All of above list	Lonicera
Cornus	Philadelphus
Forsythia	Virburnum
	Tall growing Spireas

SHRUBS AND TREES FOR SCREENING PURPOSES

Populus Volga	Evergreens
Salix Vitellina Aurea	Syringa
Salix Pentandra	Philadelphus
Lonicera Bella Albida	Rhus
	Tamarix

See description of Shrubs. Read about our Landscape Service on page 45.



Home of G. A. Marshall, May, 1922

ORNAMENTAL HEDGES

AN ornamental hedge speaks for itself. It frames the lawn and gives it a background. On the smaller grounds the low hedges are used, while for larger grounds and for screening purposes, the larger growing kinds are used. In most cases they should be planted one foot apart.

For planting, pruning and care see page 6.

***JAPANESE BARBERRY HEDGE.** Berberis Thunbergii. Used extensively where a good, dwarf, bushy hedge is desired. The foliage is an excellent green which turns to a beautiful coppery red in the fall, followed by pretty red berries. It is not susceptible to wheat rust. Can be grown either trimmed or untrimmed, with a height of from 1½ to 3 feet.

***PRIVET HEDGE.** Ligustrum Amurense. We suggest this Amoor River variety which is hardy. Upright grower, foliage glossy green, and holds its color well until late. Generally kept sheared which is easily accomplished. Can be kept anywhere from 2 to 4 feet high.

***ROSA RUGOSA.** Japanese Rose. Bright, luxuriant, glossy foliage. Beautiful large, single light red or white flowers, succeeded by large berries of a rich, rosy red color which is a great addition to the ornamental character of the plant. Makes a good untrimmed hedge of from 3 to 5 feet high. Hardy.

***SPIREA V. H.** St. Peter's Wreath. Commonly called Bridal Wreath, but is an improvement of this variety. Flowers pure white in May and early June. Good foliage, and very hardy. Height 3 to 6 feet. Generally used as an untrimmed hedge, but can be kept back to desired height.

***HONEYSUCKLE HEDGE.** Lonicera Bella Albida. Good for a tall untrimmed hedge for screening purposes. Very pretty foliage and a quick grower. Height 10 to 15 feet.

***BUCKTHORN.** Rhamnus. A hardy hedge, generally trimmed 3 to 5 feet high. Coarser than Privet.

MULBERRY. Morus Tartarica. Generally trimmed 4 to 5 feet high. Very coarse for lawn and shows stalks with age.

***SPIREA A. W.** Dwarf Pink Spirea. Produces flowers of a bright crimson and blooms so freely that it may be kept in flower throughout the summer until late fall by trimming away the dead blooms. Flower clusters about 3 to 6 inches wide. The foliage is handsome, being variegated with creamy white or yellow



Privet Hedge



Spirea Van Houttei, 2 years old, at the Nursery

and sometimes tinted with pink. Height 1½ to 2 feet. Used for low hedges along walks and drives, and seldom as a border.

BABY-RAMBLER. Rose. A low growing rose which has bloom borne in clusters like the climbing rose, Crimson Rambler. Grows 1 to 2 feet high. Blooms all summer. There are three colors to choose from, red, white and pink. When planted as a hedge, is generally placed along walks or drives instead of a border.

GRUSS AN TEPLITZ. Rose. One of the best and most valuable hardy crimson everblooming roses. Flowers large, full and sweet. Foliage sparse but pretty. Height 1 to 2 feet. Recommend along drives, walks, paths, etc.

Any good blooming hybrid roses are suitable for hedges between the lawn and garden.



Clematis Paniculata

VINES

***VIRGINIA CREEPER.** Ampelopsis Quinquifolia. Five leaf. Foliage brilliant red and scarlet tints in autumn. Blue berries. Excellent to shade porch and arbors.

***ENGELMANN'S IVY.** Ampelopsis Quinquifolia Engelmanni. Similar to Virginia Creeper, except this one clings to brick, stone or stucco and is hardest vine for this purpose.

BOSTON IVY. Ampelopsis Veitchii. Three leaf. Colors in fall. Blue berries. Semi-hardy.

CLEMATIS PANICULATA. Virgin's Bower. Good climber having long stems and white fragrant flowers, almost completely covering the vine during the late summer and early fall. Rapid grower. Should be cut back each spring. Good for shade and arbors.

***CLEMATIS JACKMANNI.** Profuse blooming variety, with flowers 4 to 6 inches in diameter, of an intense purple color. Not as easy to transplant as the Clematis Paniculata.

CLEMATIS VILLE DE LYON. Similar to Jackmanni, except flowers red.

CLEMATIS HENRYI. Similar to Clematis Jackmanni, except flowers white.

***HALL'S JAPAN HONEYSUCKLE.** Lonicera Halliana. A hardy, strong climber, nearly evergreen. Flowers pure white, changing to yellow. Blooms July until late fall. Excellent vine for porch, arbor, or ground cover.

***SCARLET TRUMPET HONEYSUCKLE.** Lonicera Sempervirens. Scarlet flowers two inches long. Blooms profusely and is very showy. Good for porches.

***TRUMPET VINE.** Bignonia Radicans. A hardy climber, large trumpet shaped flowers, 2 to 3 inches long, brilliant scarlet, in August. Good for walls or trees.

***CHINESE WISTARIA.** Wistaria Chinensis. Rapid grower. Flowers pale blue, borne in long pendulous clusters in May and June. Good for pergolas.

BITTERSWEET. Celestrus Scandens. Fine large leaves, yellow flowers and clusters of orange fruit which is very attractive in the fall.

***VITIS, BETA GRAPE.** Very hardy. Good grower. Fruit of medium size. Good for pergolas.



ROSES

R OSES are the most beautiful of flowers and are among the easiest to raise. We have given great care to the culture of the plants we offer and the following list will be found worthy and well suited to our climate.

Our roses are strong, dormant plants grown outdoors, well rooted and in every way first class. They have in most cases already bloomed before being set 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.

As all hybrid roses bloom on new wood only, they should be cut off from eight to ten inches above the ground each spring, thus they will send up good, strong shoots each spring which will produce much larger bloom than will the weak, slow growth of the old wood if left untrimmed. Clipping off the seed pods will also aid in the blooming. They should be protected in winter by throwing a mound of earth around them ten or twelve inches high during the fall, removing same in spring.

For planting, pruning and care see page 6.

CLIMBING ROSES

CRIMSON RAMBLER. The famous crimson-clustered climber.

***EXCELSA.** Flowers double, intense crimson maroon. Our best climber. Very hardy and resistant to disease and insects.

***DOROTHY PERKINS.** Clear, shell-pink, borne in clusters. Very hardy.

TAUSENSCHON. Thousand Beauties. Soft pink, later deepening.

PRAIRIE QUEEN. Bright rosy red.

SEVEN SISTERS. White to crimson.

BALTIMORE BELLE. Very double, pale blush, shading to rose color.

***WHITE RAMBLER.** Snowy white rose, borne in clusters.



Gruss An Teplitz



HARDY HYBRID ROSES

BABY RAMBLER ROSES or Dwarf Polyantha. This is a novel, distinct and charming class of roses. The plant is dwarf, height 1 to 2 feet and blooms clusters of dainty small flowers continuously throughout the summer.

BABY RAMBLER, Red. The Dwarf Crimson Rambler.

BABY RAMBLER, White. The dwarf white.

BABY RAMBLER, Pink. The dwarf rose-colored.

BLACK PRINCE. Very dark crimson.

COQUETTE DES ALPS. White, lightly shaded with carmine.

EUGENE FURST. Dark crimson.

FRAU KARL DRUSCHKI. Snow Queen. Our best white.

FISHER HOLMES. Brilliant carmine-crimson.

***GENERAL JACQUEMINOT.** Brilliant crimson. Very good.

***GRUSS AN TEPLITZ.** One of the best and most valuable, hardy crimson, everblooming roses. Red. The best bloomer in the West.

JOHN HOPPER. Bright rose, with carmine center.

J. B. CLARK. Deep scarlet, overlaid with crimson.

***KAISERINE AUGUSTA VICTORIA.** Pearly white, lightly tinted with lemon in the center.

KILLARNEY. Color flesh, shaded white. Very good.

MADAM CHAS. WOOD. Deep rosy crimson, sometimes brilliant scarlet, with maroon shading.



Snow Queen

MAGNA CHARTA. Bright pink, suffused with carmine.

MRS. JOHN LAING. Soft, delicate pink.

***PAUL NEYRON.** A beautiful deep rose color; the largest rose.

PRINCE CAMILLE DE ROHAN. Dark velvety crimson changing to maroon.

***SOLIEL D'OR.** Sun of Gold. Orange Yellow. Fine rose.

MOSS ROSES

COUNTESS OF MURINAIS. Fine white.

GLORY OF MOSSES. Pale rose, very heavily mossed.

LUXEMBOURG. Large, purplish crimson. Very good.

YELLOW JUNE ROSES

***HARRISON YELLOW.** Semi-double, bright yellow.

***PERSIAN YELLOW.** Deep golden yellow, semi-double.

BUSH ROSES

This type of roses is desirable for groupings in connection with shrubby plantings. Good for banks and borders. They do not need protection and are of the single type.

BLANDA. Meadow Rose. Pink flowers, red fruit.

MULTIFLORA. Old fashion rose. The best for landscape banking.

RUBRIFOLIA. Reddish purple leaves.

SETIGERA. The typical prairie rose.

RUGOSA ROSES

This type of rose grows 3 to 5 feet high, covered with very pretty large dark green, crinkled, glossy foliage; flowers are single, colors light red or white, succeeded by large berries



General Jacqueminot

of rich, rosy red color, which is a great addition to the ornamental character of the plant. Very good for lawn and foundation groupings and for hedges.

ROSA RUGOSA. Above description.

RUGOSA, ALBA. Above description.

***CONRAD FERD MEYER.** Early flowering hybrid, combining Rugosa foliage with Hybrid

Perpetual blossom. Flowers silvery pink. Hardy.

***AMELIA GAVERAU.** Good foliage. Flowers red.

***SIR THOMAS LIPTON.** Fair foliage, good double white rose, early and constant bloomer.

***HANSA.** True Rugosa foliage. Deep violet-red, double, very hardy.



HERBACEOUS PERENNIALS

THESE can be used to best advantage in groups and beds on the lawn, as borders for drives, walks, or in front of shrubbery and in the garden. Some of the tall-growing sorts may be planted in among the shrubbery with good effect. Soil should be kept well fertilized. A light covering of coarse, strawy manure or something that will not pack is beneficial in winter.

For planting and care see page 6.

ACHILLEA PTARMICA. "The Pearl," Milfoil. Bears great masses of small pure white flowers on long stems, all summer. Fine for cutting. Height 12 to 18 inches.

***ACQUILEGIA.** Columbine. Blooms in spring. Grows in sun or partial shade. Height 18 to 24 inches.

ACQUILEGIA CANADENSIS. An old favorite. Flowers light red and yellow.

ACQUILEGIA CHRYSANTHA. Golden-spurred Columbine. Color golden yellow.

ACQUILEGIA COERULEA. Rocky Mountain Columbine. Color pure blue.

ACQUILEGIA CALIFORNIA HYBRIDA. California Hybrids. Long-spurred flowers in a variety of coloring such as yellow, pink, flesh, red, etc.

BUDDLEIA. Butterfly Bush. So named because blooms attract large numbers of butterflies. This fact makes the plant very interesting, especially to children. Matures first year and dies down like a peony. Blooms profusely, lilac colored tapering panicles, 6 to 10 inches long. Height 3 to 4 feet.



Achillea



Trees Shrubs and Plants



CAMPANULA CARPATHICA. Harebell. Blooms June to September. Flowers deep blue. Height 9 inches.

***COREOPSIS GRANDIFLORA.** Tickseed. Flowers rich golden yellow. Blooms continuously. Good for cutting. Height 2 to 3 feet.

CHRYSANTHEMUM HYBRIDUM. Shasta Daisy. Flowers large, color white with golden center.

CHRYSANTHEMUM. Hardy Pompon. This class of beautiful plants is now universally popular for outdoor bedding, and justly so. They produce a lavish profusion of blooms, giving color, life and beauty to the garden at a time when other plants have been nipped by frost. They are quite hardy, but it is well to give a slight covering of leaves or manure during winter. Grow from 2 to 3 feet high.

***DELPHINIUM BELLA DONNA.** Larkspur. The clear turquoise blue of its flowers is not equalled. Flowers in showy spikes. Hardy. No herbaceous border is complete without it. Height 3 to 5 feet.

DIANTHUS BARBATUS. Sweet William. The old time favorite. Blooms May and June. Mixed colors. Height 1½ to 2 feet.

DIANTHUS, DELTOIDES ROSENS. Hardy Pink. Old time favorites. Bloom June-July. Fragrant. Height 9 inches.

DIANTHUS PLUMARIUS. Scotch Pinks. Colors mixed. Otherwise same as above.

DIELYTRA SPECTABILIS. Bleeding Heart. Flowers pink, heart-shaped. May. An old favorite. Height 1½ to 2 feet.



Coreopsis

DIGITALIS PURPUREA. Foxglove. Colors, mixed. Long, bell-shaped flowers. Height 3 to 4 feet. July.

***GAILLARDIA GRANDIFLORA.** Blanket Flower. Very hardy. Daisy-like flowers 2 inches across on single stems. Excellent for cutting. Colors gold and crimson. Blooms all summer. June-September. Height 1 foot.

GYPSOPHILA PANICULATA. Baby's Breath. Forms a beautiful mass 2-3 feet high and wide. Cloud-like sprays of tiny white flowers during August and September, presenting a lovely gauze-like appearance. Used in bouquets to combine with highly colored flowers.

***HIBISCUS.** Mallow Marvel. Habit of growth similar to Hollyhocks. Very large flowers makes showy bloom. Bloom July-September. Colors red or mixed. Very attractive. 3 to 5 feet.

***HOLLYHOCKS, Double.** Althea. For tall backgrounds. This is double perennial type. Colors mixed. Height 4 to 6 feet.

LATHYRUS LATIFOLIUM. Perennial Pea. A vining Pea of easy cultivation. Not necessary to replant as it is a hardy perennial.

***LILIUM TIGRINUM.** Tiger Lily. Flowers bright, deep orange red with numerous small purplish black spots, in many flowered racemes. Very hardy. One of Grandmother's flowers. Height 2 to 4 feet.



Delphinium

LILIUM AURATUM. Gold-banded Lily. Large flowers, pure white, spotted crimson with a wide band of gold running throughout the center of each petal. Height 2 to 3 feet.

LILIUM UMBELLATUM. Tall growing, upright, beautiful bell-shaped flowers of coppery orange to red, sometimes slightly spotted. Height 1½ to 3 feet.

LILY OF THE VALLEY. *Concallaria Majalis.* Heavy dark green foliage. Prefers a cool, shaded corner. Blooms May. Sprays of drooping, pure white, wax-like, fragrant bell-shaped flowers. Height 6 inches.

***PLAINTAIN LILY.** *Funkia.* Large, attractive, glossy foliage. Height 1 foot.

***LEMON DAY LILY.** *Hemerocallis Flava.* Grass-like foliage. Hardy. Adapted to shady places. Very fragrant. Blooms June. Color of flowers, yellow. Height 2 feet.

TAWNY DAY LILY. *Hemerocallis Fulva.* Habit of growth similar to *Hemerocallis Flava.* Blooms July. Color of flower, deep tawny yellow.

PLATYCODON GRANDIFLORUM. Japanese Bellflower. Deep blue, cupped, star-shaped flowers. Neat foliage. July-September. Valuable. Height 1 to 2 feet.

***RUDBECKIA LACINIATA.** Golden Glow. Flowers double, rich, golden yellow; 2 to 3 inches in diameter. Plants have solid heads of bloom during July to September. Height 6 to 7 feet.

***RUDBECKIA PURPUREA.** Purple Cone Flower. June to September. Very large red-



Sweet William

dish purple flowers on good stems, with a remarkably large cone-shaped center of brown thickly set with golden tips in spiral lines. Height 3 to 4 feet.

***YUCCA FILAMENTOSA.** Adam's Needle. Planted for its evergreen foliage and straight upright effect which is quite a contrast with other shrubbery. Grows 1½ to 2 feet high with a long flower stalk appearing in spring which grows 2 to 3 feet high and is covered with large whitish, bell-shaped flowers in July.



Yucca

GERMAN IRIS

No garden is complete without a collection of these flowers. They rival the orchid for exquisite bloom. You can have blossoms from May to July by selecting early and late sorts. Also a variety of color of bloom.

PERFECTION. Light and dark blue, velvety violet-black with orange beard. 2 to 3 feet.

QUEEN OF MAY. A lovely soft rose-lilac, almost pink, beautiful. 2 to 3 feet.

HONORABILIS. Intense yellow and bronze. Very effective. 2 to 2½ feet.

COMMON. Purplish blue and purple. 1½ to 2 feet.

SAPPHO. White, frilled with lilac and pure white, reticulated lilac at the base; large flower; a fine variety. 2 to 3 feet.

FAIRY. White, delicately bordered and suffused with soft blue. Beautiful. Odor of peach blossoms. 2 to 3 feet.

BLACK KNIGHT. Intense deep violet-blue, and velvety-purple. Exceedingly rich.

PALLIDA SPECIOSA. Violet, white veined plum color. Fragrant.

SIBERIAN. Deep blue, narrow leaves. 12 to 18 inches.

PEONIAS

These garden plants are among the choicest and most desirable. Their beautiful flowers appear like immense roses, are very fragrant, and offer a wide range of color. Bloom May June. They are hardy and indispensable. Below is a list of the best varieties. Hardy everywhere.

FESTIVA MAXIMA. Very large, globular, rose type. Pure white center, prominently flecked with crimson; outer petals sometimes faint lilac, white on first opening. Early. The most popular white.

QUEEN VISTORIA. The broad guard petals are a pretty bluish-white, center slightly edged pink. Large.

L'ESPERANCE. Deep rose with crinkly, white tips; extra large and fine; the earliest large pink.

UMBELLATA ROSEA. Light shell pink. Our earliest blooming peony. Very good.

FULGIDA. Very good crimson-purple.

PLUTARCH. Deep crimson, stamens golden yellow. Large and showy.

RUBRA SUPERBA. Large, deep red, very late. Very fragrant.

PHILOMENE. Pink with yellow center. Free bloomer. Distinct and novel.

UNNAMED PEONIAS. White, pink, red.



Peony Festiva Maxima

HARDY PHLOX

The Phlox which we list are all tried and true—extra good for western planting. We take pleasure in selling Phlox to our customers—we know they are purchasing a flower worth while—there is nothing better for summer and autumn bloom. Miss Lingard, however, is an early blooming variety, beginning to bloom before the Peony bloom is gone. Pyramidalis follows within ten days, about June 30th, and most of the standard sorts begin to bloom in July. Many of our customers purchase one each of nearly every kind. They would make a much better showing if they purchased less varieties and more of each.

You will be well repaid if you keep soil loose and moist around them. Mulch heavily with fertilizer during winter. This protects Phlox and enriches ground.

BRIDESMAID. White tinted lavender, pink eye. Medium.

CHAMPS ELYSEE. Rich dark crimson. Medium.

F. G. VON LASSBURG. The purest and largest white phlox in cultivation. Medium.

MISS LINGARD. White, faint lilac eye. Very free blooming. One of the most popular white phlox grown.

JULIA. Round, compact heads, soft pink, red eye. Medium height.

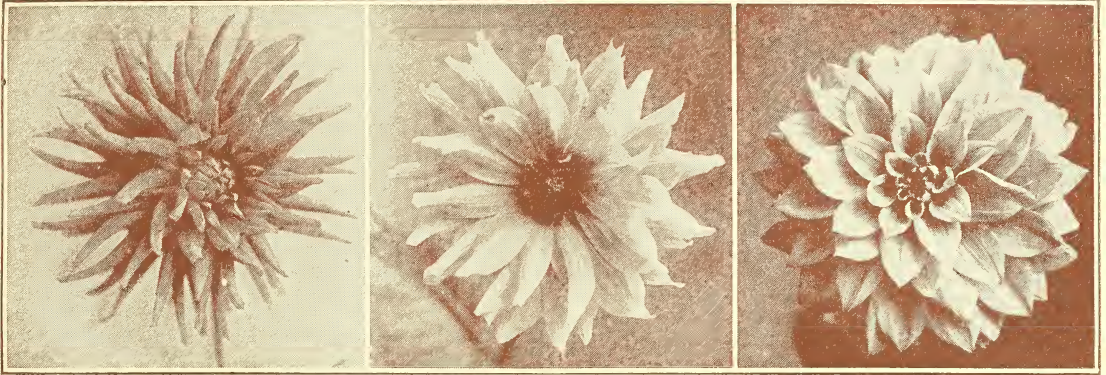
PYRAMIDALIS. Symmetrical head, pure white. Very early. One of the hardiest and most satisfactory white phlox grown.

FANTOME. Lavender.

R. P. STRUTHERS. Cherry red suffused with salmon.



Hardy Phlox



Dahlia

SUMMER FLOWERING BULBS AND ROOTS

UDER this heading will be listed many tender varieties of plants such as Cannas, Dahlias, Gladiolas, etc., that will have to be taken up in fall after frost comes and stored in the basement where they will not freeze and be replanted in spring. However much one may dislike to do this we cannot dispense with the Canna, which is so widely used for its tropical, decorative effect; with the Dahlia which furnishes us with such a profusion of bloom from August until frost or with the beautiful summer flowering Gladiola, so valuable for its generous supply of cut flowers, which when cut in bud will last ten days in the house.

Roots should be taken up before fall freezes and kept in a cool, dry cellar. Plant 4-6 inches deep late in April or early part of May.

CANNAS

DAVID HARUM. 3½ feet, bronze foliage, flowers fiery reddish orange.

KING HUMBERT. The grandest Canna ever offered. Large, leaves of purple madder brown over bronze, crowned with immense heads of Orchid-like flowers, velvety orange-scarlet flecked carmine. A combination of leaf and blossom incomparably beautiful. 4 to 4½ feet.

PRESIDENT McKINLEY. 2 to 3 feet, for outside row, green foliage, flowers crimson, shaded scarlet.

RICHARD WALLACE. 4 feet, green foliage, canary yellow flowers. Good variety.

CACTUS DAHLIAS

COUNTRESS OF LONSDALE. A peculiar but pleasing blending of salmon-pink and amber, a color difficult to describe. This is the dahlia for the millions. Flowers freely under all conditions.

PINK PEARL. Full, perfect form, with blunt quills, slightly waved. Lilac pink with lighter tips and aureole; button center of deep rose.

PRINCE OF YELLOWS. Pure saffron yellow, perfect form, and liberal in its bloom during an opportune season.

ICEBURG. Ivory white.

GEN. BULLER. Cardinal-red, each petal tipped with white.

J. H. JACKSON. Brilliant crimson-maroon; very free.



Canna



DECORATIVE DAHLIAS

A. D. LIVONI. Beautiful clear pink, of perfect form and very free.

CATHERINE DUER. Iridescent red; a favorite for cutting.

GRAND DUKE ALEXIS. Large, massive flowers, ivory-white, with a faint tinge of rose at the extremities of the petals.

JACK ROSE. Brilliant crimson red, rich and glowing, similar in shade to the popular "Jack" rose, which suggested its name. The habit of the plant is perfect for garden decoration, while its stiff stems, holding the large flowers erect, secure for it a foremost place as a high-colored cut flower.

QUEEN WILHELMINA. Immense, fluffy flower of pure white with yellow center.

ZULU. Deep maroon with black shadings.

GLADIOLI

AUGUSTA. A beautiful white variety, with lavender anthers. Strong spike, often having two or three branches.

AMERICA. Beautiful, soft flesh-pink, faintly tinged with lavender. A magnificent cut-flower.

BARON HULOT. One of the finest blue Gladioli. A deep violet blue with well-opened flowers.

CRACKER JACK. Dark rich velvety maroon with blotches of yellow on lower petals.

KLONDYKE. A clear yellow, with a vivid crimson, maroon blotch in the throat, a splendid free grower.

MRS. FRANK PENDLETON. Bright rose pink on a pure white ground. A giant blotch



Gladioli

of richest carmine red on lower petals. No grander variety in existence.

MRS. FRANCIS KING. A striking shade of light scarlet or flame color; one of the most effective both in the border and when cut.

ROBERT BROOMFIELD. Pure white, large flowers, very free.



An Effective Foundation Screen



MARSHALLS LANDSCAPE SERVICE

NATURE provides the tools and pigments with which to turn your home grounds into a beautiful bower, but she leaves it to you to blend the color tones into a harmonious chorus and to shape the lines into a picture of true artistry.

No matter how pretentious the house or how humble, it can be made more pleasant, attractive and homelike by a tasteful arrangement of the landscape surrounding it.

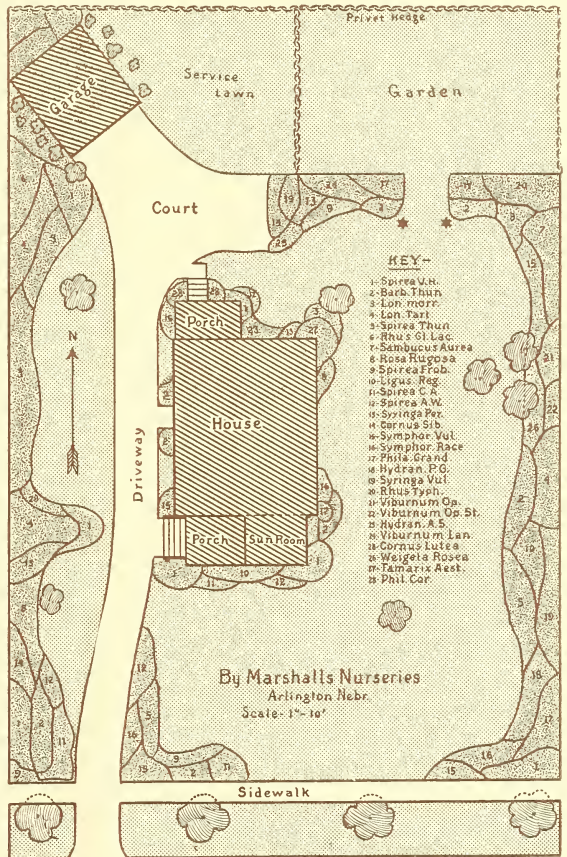
In addition to the personal satisfaction derived from attractive grounds, a very definite financial value is added to the home place by a little careful horticulture.

The aim in planning the home grounds should not be just a collection of plants and other objects; it should be to produce a pleasing picture, blending and harmonizing with the distant prospects.

There should be no evidence of a strained effort toward individualism, nothing to even suggest inconsistency with local nature. Rather should one strive for the appearance of a natural beauty spot, the charm of which has been enhanced, but not radically changed, by loving hands.

We cordially invite your attention to our system of practical Landscape Gardening. We have carefully studied soils, climate, trees, plants, roses, etc., and are prepared to give our patrons the benefit of our past experience, and will give their work our personal attention. Every piece of ground will be thoroughly studied, with reference to its use and surroundings, its advantages and charms, whether park, farm or private grounds.

Our Landscape Department is thoroughly equipped to do this work. It will solve every landscape problem for you; conceal the bare foundation of the house; soften the stiff angles of the architecture; hide objectionable features of adjoining property; provide walks and drives; screen the service yard, vegetable garden, fences, walls, etc.; enlarge upon any particularly pleasing view; and provide a succession of beautiful flowers and pleasing contrasts of foliage during the growing season, and attractive winter color combinations in foliage, bark, and fruits.



This work is done by men who are acquainted with the habits of every tree, shrub, or flower that will thrive in your locality. Every place demands a different plan that will exactly fit your requirements. Call in our landscape architect before you plan your planting. Let him study out the peculiar lay of your land, the conditions surrounding it and the influence the buildings will have on the picture. If you do, you are certain to get a working plan from him that will be more effective than any less expert knowledge could give you. The beautifying of your home grounds is of sufficient importance, both from the standpoint of financial value and of personal gratification to warrant you in employing expert advice and help.

We make detailed drawings and blue-prints, locating every tree and plant used in the plan. No charge is made for the design when we furnish the stock for the planting.

Ask our agent or write us for further information.

SPRAYING

THERE are four distinct types of troubles to combat, ie: chewing insects, sucking insects, scale insects and fungous diseases. Chewing insects are controlled with a stomach poison, some form of arsenic (lead arsenate), sucking insects (lice or aphids) by body contact poison, (nicotine) or miscible oil (kerosene emulsion), and fungous diseases by lime-sulphur solution or Bordeaux mixture. Be sure you know what you are spraying for since arsenate of lead will not control lice or aphids, nor will nicotine or kerosene emulsion control apple worms and neither of these will have any effect on apple scab or other fungous diseases. Lime-sulphur is used as a dormant spray for scale insects and also for fungous. In spraying the apple, keep in mind the two main apple troubles in the Central West, codling moth and apple scab, and in controlling these most other troubles are incidentally controlled. Lead-arsenate and lime-sulphur or Bordeaux mixture are the sprays to use.

SPRAYING MATERIALS

The most common and best form of arsenic used is "arsenate of lead." This may be secured from drug stores and seed and garden supply houses. Thoroughly dissolve three pounds of paste arsenate of lead or 1½ pounds of dry arsenate of lead in a small amount of water in a pail and add to fifty gallons of water or other spraying solution.

Bordeaux mixture is prepared by dissolving four pounds of copper-sulphate ((bluestone), in a small amount of water and diluting to twenty-five gallons; slacking five to six pounds of good lime and adding water to make twenty-five gallons. These solutions should then be combined by pouring or dipping simultatenously from each into a third vessel or spray tank.

The commercial lime-sulphur is used almost exclusively by many fruit growers. This may be obtained from same sources as arsenate of lead or direct from manufacturers. To combine the fungous spray and the insect spray simply add the dissolved poisons to the fungus solutions.

Kerosene in its natural, undiluted state, is fatal to all insect and vegetable life, but properly prepared may be used safely and with much benefit: Dissolve a bar of Ivory soap in one gallon of hot water, then add two gallons of kerosene and churn it vigorously until cool., If made right it is then like cream, and will keep indefinitely. For general use take one part of the mixture to ten parts water and use as a spray. Will be found very valuable in getting rid of aphids, mealy bugs, red spider, etc. May be used against any soft-shelled insect.

SPRAYING MACHINERY

Spraying Machinery—The size of the spraying outfit needed depends on the size and age of orchards. High pressure is essential for effective work in all cases. While this may be obtained with high-grade hand-power outfits, it is slow and hard work to maintain the pressure. For small orchards containing up to 100 or 200 trees, however, this kind of an outfit can be made to do satisfactory work. But for larger orchards gasoline power outfits are recommended. These are now manufactured in several sizes, but all maintaining the same high pressure. The prices range from about \$100 up for complete outfits. These are assembled in such manner that the engine may be easily disconnected and be used throughout the year for pumping water and other light work about the farm, making the actual extra cost for the pumps and other equipment little more than for the best hand outfits.

If interested in a spraying outfit advise us and we will place you in touch with manufacturers of good machines.

WHEN AND HOW TO SPRAY

GRAPE

What to Spray For	Treatment	When to Spray	Remarks
Anthracnose Black Rot Mildews	Bordeaux mixture,	(1) Just before buds open. (2) After blossoms have fallen. Two or three others at 10-14 day intervals.	Careful winter pruning and disposal of diseased wood with application of lime-sulphur (winter strength) in dormant season aids in anthracnose control.
Berry Moth Leaf Hopper	Bordeaux with 2 lbs. Arsenate of Lead.	Follow program recommended above when these insects are prevalent.	Dusting with fine sulphur is recommended for some vines of European origin for mildew control.

BLACKBERRY AND RASPBERRY

Anthracnose	Lime-sulphur as directed.	(1) In spring before growth starts (2½ gal. in 50). (2) When new shoots are 6-8 inches high (1¼ gal. in 50). (3) Just before blooming period. Dilute as in (2).	
-------------	---------------------------	---	--



WHEN AND HOW TO SPRAY—Continued

APPLE

What to Spray for	Treatment	When to Spray	Remarks
Scale Insects	Lime-sulphur, 1 to 8; Scalecide, Miscible Oils	In dormant season; when trees are leafless.	Protect men and animals at work from caustic action of Lime-sulphur on the skin.
Apple Aphids (lice)	Nicotine, 1 to 800, added to lime-sulphur, 1 to 40.	In spring when buds are bursting showing green tips.	Of no use after leaves are curled. Use high pressure.
Scab Black Rot Bud Moth Cankerworm Tent Caterpillar	Lime-sulphur, 1 to 40, with 2 lbs. Arsenate of Lead.	When flower buds show pink, but before any have opened. (Other sprays as recommended for codling moth, below, will incidentally control troubles in this group.)	In severe cases of cankerworm use Paris Green 4 oz. in fifty gallons of water with twice as much slaked lime.
Codling Moth	Lime-sulphur, 1 to 40, with 2 lbs. Arsenate of Lead. Arsenate of Lead, 2 lbs. to 50 gals. water.	(1) When most of the petals have fallen (calyx spray). (2) Approximately three weeks after the bloom. (3) Approximately ten weeks after the bloom. (4) Fifteen to seventeen weeks after the bloom.	After weather becomes hot (from about July 1) discontinue lime-sulphur and use Bordeaux with 2 lbs. Arsenate of Lead.
Blotch Curculio	Lime-sulphur, 1 to 40, with 2 lbs. Arsenate of Lead. Bordeaux, 4-4-50, with 2 lbs. Arsenate of Lead.	(1) As in (2) under codling moth (above) except two weeks after bloom in south. (2) Approximately five weeks after the fall of the bloom. (3) As in (3) under codling moth (above).	Necessary in South where there may be three broods in one season. Clean orcharding assists in curculio control. Spraying not always wholly effective. Arsenate of Lead may be omitted if no curculio is present.
Sooty Blotch Fly Speck		Usually checked as incidental results of applications recommended above.	More common in regions where air and water drainage is poor.
Bitter Rot	Bordeaux	Where disease is looked for begin spraying in early summer, making applications often enough to keep fruit coated.	
Apple Rust or Cedar Rust	Spraying not effective.	Remove cedar trees nearby.	The rust cannot live without cedars on which it spends part of the year.
Blight		See under Pear, Fire Blight.	

PLUM

San Jose Scale European Fruit Scale	Lime-sulphur, 1 to 8.	When tree is dormant.	
Curculio Brown Rot Leaf Spot	Lime-sulphur, 1 to 50, with 2 lbs. Arsenate of Lead.	Similar to cherry, which see.	Brown rot spreads very rapidly in warm, moist weather and can be controlled only if fruit is kept coated.

PEAR

Fire Blight	Spraying ineffective.	In some cases where particular care is taken, prompt and severe pruning at the first sign of blight, disinfecting tools and wounds with corrosive sublimate solution, may check its spread to some extent.	
Scale Insects Blister Mite Pear Psylla	Lime-sulphur, 1 to 8; Scalecide, Miscible Oils.	In dormant season, preferably early spring.	Scrape dormant trees and burn all orchard trash to aid in psylla control.

Practically all the other common diseases and insects on the apple are also found on the pear to some extent. See methods of control under apple (above).

CHERRY

Curculio Brown Rot Leaf Spot Shot Hole Fungus	Lime-sulphur, 1 to 50, with 2 lbs. Arsenate of Lead.	(1) Just before buds open. (2) Immediately after blossoms fall. (3) About ten days after (2). (4) Additional sprays if necessary at two-week intervals.	In some localities it may be safer to dilute the lime-sulphur somewhat, preventing foliage injury.
Cherry Aphid	Nicotine sulphate, 1 to 800.	When aphids first appear before they have caused the leaves to curl.	Be careful to cover underside of leaves. Use high pressure and soap.
Cherry Slug	Arsenate of Lead, 2 lbs. to 50 gals. water.	On first appearance of insects.	

CURRANT AND GOOSEBERRY

Leaf Spot Anthracnose	Bordeaux	Beginning as soon as the leaves are opened make five to seven applications at two-week intervals.	
Currant Worm	Arsenate of Lead, 2 lbs. to 50 gals. water.	At the first appearance of the worms. If there are two broods repeat spray.	Dry hellebore may be dusted on, if near picking time.
Currant Plant Louse	Nicotine sulphate, 1 to 800 of water.	Soon after eggs hatch in spring (soon after the leaves open).	Thoroughness necessary, hitting all leaves from beneath.

STRAWBERRY

Leaf Spot	Bordeaux	Before blossoms open. Additional applications if spot appears.	Renew beds frequently. May mow off and burn foliage after berries are picked.
-----------	----------	--	---



TABLE OF CONTENTS

	Page
Apple, The	7
Summer	7-8
Fall	8-9
Winter	9-11
Crab	11
Apricots	16
Asparagus	23
Blackberries	20
Care of Stock When Received.....	3
Cherries	13
Currants	20
Directions for Transplanting, Care, Etc.	3-6
Evergreens	28
Abies	28
Juniperus	28
Picea	28
Pinus	29
Thuja	29
Grapes	18
Black	18
Red	18
White	18
Juneberry	19
Guarantee of Genuineness.....	2
Gooseberries	19
Herbaceous Perennials	39-41
Peonias	42
Hardy Phlox	42
Introductory	2
Landscape Service	45
Number of Trees and Plants on an Acre.....	3
Ornamental Department	24
Deciduous Trees	24-26
Weeping Trees	26-27
Ornamental Hedges	35
Ornamental Shrubs	30-34
Peaches	17
Pears	12
Planting, Pruning	3-6
Plums	14
Hansen's Hybrid	15
Raspberries	21
Black	21
Red	21
Rhubarb	23
Roses	37
Climbing	37
Hardy Hybrid	38
Moss	38
Yellow June	38
Bush	38
Rugosa	38
Shelter Belt Planting.....	27
Spraying Formulas	46-47
Strawberries	22
Everbearing	22-23
Summer Flowering Bulbs and Roots.....	43
Cannas	43
Dahlias	43-44
Gladioli	44

