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# Descriptive Catalog OF 

Fruit and Ornamental
Trees, Shrubs, Roses Perennial Plants, Etc.


ESTABLISHED EIGHTEEN SEVENTY

## GROWN AND FOR SALE AT THE

Shenandoah Nurseries
D. S. LAKE, Proprietor

SHENANDOAH, IOWA


## LA FRANCE

(See description in Rose Department)
Everyone should have a rose garden. They require small care and repay a hundred fola in quantity and beauty of blossoms.

## The Shenandoah Nurseries

# A Little History, Class of Stock, Location, Methods and Business Rules 

These nurseries were established in 1870 , at Shenandoah, Iowa, on what was then prairie land, located on the hill sides south of the famous Nishna Botna Valley. Starting with only a few acres of land and no improvements to speak of, the business has grown under the same management, to a plant of over six hundred acres and with modern storage buildings and facilities second to none in the United States.

A great variety of soils and the knowledge acquired by long experience as to the special class of trees that will do well on each, makes it possible to grow the best of the many types with a good root system and well furnished tops.

A well organized force of experienced men and close personal attention to all departments of the business makes our relations with customers generally satisfactory.

We are located in Southwestern Iowa on the Chicago, Burfington \& Quincy Railway, Wabash and Keokuk \& Western Railroads, and have low freight rates and direct lines to Chicago, Denver, Kansas City, Minneapolis, Omaha, St. Lovis, St. Joseph and other central points. For express shipments, the Adams and Pacific Express Companies give good service.

## TO CORRESPONDENTS

THE PACKING SEASON-In the spring we usually begin shipping about March 15th, although a complete assortment of stock with the exception of heavy Shade Trees, Evergreens, Black Raspberries and Strawberries, is in frost-proof cellars connected with Chicago, Burlington \& Quincy switch, which can be shipped at any time during the winter. Autumn shipping begins about October 1st.

TERMS OF SALE-Customers ordering goods should state whether they wish them sent by freight or express; also give routing directions. In case these instructions are not given, we forward to the best of our judgment, but in no case will we assume responsibility after consignment to purchaser.

TERMS OF PAYMENT-Cash or security before shipment of goods, except with established firms, when if unknown to us, satisfactory reference will be required before goods are forwarded. Orders to be sent C. O. D. should be accompanied by one-fourth cash.

CAUTION-We accept all orders upon conditions that they shall be void should any injury befall stock from frost. fire, hail. storms or other causes over which we have no control. CERTIFICATE OF INSPECTION will be furnished wian "ach shipneem.
ORDER EARLY-Place orders early wiile assortments are complete.
SUBSTITUTION-In filling orders we reserve the right, in case we are out of a variety ordered, to substitute another equally as good and labeling with correct name unless customer writes no substitution in the order.

## GUARANTEE OF GENUINENESS

While we exercise the proper diligence and care to have all our trees, etc., true to label and hold ourselves in readiness on proper proof, to replace all trees, etc., that may prove untrue to label, free of charge or refund the amount paid, it is mutually understood and agreed to between the purchaser and ourselves that our guarantee of genuineness shall in no case make us liable for any sum greater than that originally received for said trees, etc., that prove untrue.

## ADVICE TO PLANTERS

As soon as trees are received they should be heeled in so that the mellow earth will come in contact with all the roots. Take only a few out at a time as an hour's exposure to the hot sun will be almost sure to ruin them. Evergreens, especially, will not stand exposure and must have the very best of care.

Fruit as a rule cannot be produced on soil that is undrained or not rich enough to produce a good corn crop.

Bruised roots should be cut off smoothly so that they will heal over.
PRUNING-Standard trees for the orchard should be trimmed up to five or six branches, suitable to form the top; cut each of the side branches back to a bud four or five inches from the body of the tree, leaving the leader ten to twelve inches long. Dwarf Pears do not, as a rule, need trimming.

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

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

AFTER CULTURE-After young trees are planted, do not allow grass to grow around them. Keep the ground clean and loose, at least until they are of bearing size.


#### Abstract

TREATMENT OF TREES THAT HAVE BEEN FROZEN IN THE PACKAGES OR RECEIVED DURING FROSTY WEATHER-Place the packages, unopened in a cellar or some such place, cool but free from frost, until perfectly thawed, when they can be unpacked and either planted or placed in a trench until convenient to plant. Treated thus, they will not be injured by the freezing.


## A TABLE SHOWING THE NUMBER OF TREES OR PLANTS TO THE ACRE

| Distance. | No. of trees. | Distance. | No. of trees. |
| :---: | :---: | :---: | :---: |
| 1 foot apart each way | 43,560 | 13 feet apart each way | 257 |
| 2 feet apart each way | 10,890 | 14 feet apart each way | 222 |
| 3 feet apart each way | 4,840 | 15 feet apart each way | 193 |
| 4 feet apart each way | 2,702 | 16 feet apart each way. | 170 |
| 5 feet apart each way | 1,742 | 17 feet apart each way | 150 |
| 6 feet apart each way | 1,210 | 18 feet apart each way | 134 |
| 7 feet apart each way | 888 | 19 feet apart each way | 120 |
| 8 feet apart each way | 680 | 20 feet apart each way | 108 |
| 9 feet apart each way | 537 | 25 feet apart each way. | 69 |
| 10 feet apart each way | 434 | 30 feet apart each way. | 48 |
| 11 feet apart each way | 360 | 35 feet apart each way. | 35 |
| 12 feet apart each way. | 302 | 40 feet apart each way | 28 |

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

SUITABLE DISTANCES FOR PLANTING


## APPLES

The apple is the first fruit, both in importance and general culture. Its period, unlike that of other fruits, extends nearly or quite through the year. By a judicious selection of summer, autumn and winter sorts, a constant succession can be easily obtained of this indispensable fruit for family use. Its uses are many, and of inestimable value. It has been said that "Fruit is nature's own remedy." Many diseases are not known to free users of fruit. There is not a farm crop which on the average will produce one-fourth as much income per acre as will a good apple orchard. Care should be taken in making selections that will be suitable to your locality, as some of the apples are of more value in different locations than others. There is not a locality that will not produce good apples in abundance of some of the many varieties known. The list that we name here are all of the well known, suitable varieties, and we can recommend as being of first quality.

## SUMMER APPLES

Benoni-Medium in size, roundish, deep red on rich yellow; flesh yellow; rich, sub-acid; late summer. Tree erect and good bearer.
Carolina Red June-Size medium, oblong, very red; flesh white, juicy, sub-acid with agreeable flavor; early and continues to ripen for four weeks; a good summer apple and profitable for market. Tree erect grower, very hardy.
Duchess of Oldenburgh - Medium, rather large, roundish, a little flattened at the ends; light red in broad stripes and splashes on yellow ground; flesh yellow, sub-acid; good for cooking; early autumn; very hardy. One of the most valuable sorts for the West.
Early Harvest-Size medium, roundish, usually more or less oblate; bright straw color when ripe; flesh nearly white and flavor rather acid; ripens early and continues for about three weeks afterward; productive.
Golden Sweet-Nedium or rather large, roundish: color green, becoming pale yellow when ripe; flesh very sweet and of moderate quality. Tree is a very free grower and productive; valuable for cooking purposes; late summer.
Lowland Raspberry-Of Russian origin; color white, shading to crimson; flesh white: tree hardy, long-lived and succeeds very well north and south; very juicy and sweet. July to August.
Red Astrachan-Medium to large; beautifully mottled with crimson; covered with heavy bloom; tree very hardy and a popular variety. Ripens in July.
Yellow Transparent - Medium, round, rather conical; skin yellow, almost transparent; flesh very crisp, sub-acid and of a good quality. A very excellent early market apple, especially valuable for culinary purposes.

## AUTUMN APPLES

Autumn Strawberry-Size medium, roundish, slightly conical; sometimes faintly ribbed; flesh yellowish white and slightly fibrous;
very tender and juicy, and with a fine, agreeable sub-acid flavor; young trees of remarkably thrifty growth; ripens early in autumn, and often keeps until winter; very productive.
Bailey's Sweet-Large, regular, ovate; often slightly and sometimes considerably ribbed; whole surface frequently a full bright red, in small broken indistinct stripes and dots; flesh very tender; flavor mild, rich and sweet. Early winter.
Fameuse-Medium, roundish and oblate; color rich red; flesh very delicate and flavor good. An excellent dessert apple.


Red Astrachan.
Hass-Medium, oblate-conic, striped with red; flesh whte and jucy; flavor sub-acid, rich and very good; popular in the Southwest.
Hibernal-Origin, Russia. Season, November, December. This variety represents what is probably the hardiest type of the Russian race; adopted by many prominent horticulturists as a standard of hardiness. Tree sturdy, vigorous, very spreading and produc-

## AUTUMN APPLES, Continued

tive. Fruit, large to very large, irregular; greenish yellow, with dull bronze red on sunny side. Flesh acid, juicy, very good for cooking. Succeeds in the most exposed locations and is popular in the Northwest on this account.
Iowa Beauty-Medium, conical, regular and smooth; yellow, blush red on sunny side; flesh fine grained, juicy, sub-acid and very good.
Kaump-Medium, light green; quality good; early and constant bearer; tree vigorous; a good variety for the North.
Maiden's Blush-Rather large, smooth and regular; with fine, evenly shaded red cheek on clear, pale yellow ground; flesh white, fine grained, tender and sub-acid; of uniform productiveness; valuable for the West.


## Wealthy.

Patten's Greening-Tree hardy, productive and an early bearer, fruit large and smooth; olive green, blushed with dull red; flavor pleasant, sub-acid. A superior cooking apple.
Red Bietigheimer-Very large, round and oblate; dark yellow, covered with purplish crimson; flesh firm, sub-acid and of a good flavor; tree a vigorous grower and free bearer; hardy.
Rambo-Size medium, oblate and smooth; color, streaked and marbled with dull yellowish red on pale yellow ground; flesh tender, rich sub-acid and of fine flavor. Tree good grower and productive.
Utter's Red-Medium to large, roundish, color white, shading to red; very good quality. One of the best fall apples.
Wealthy-Fruit large, variegated red in color; tree a good grower; flesh fine grained and sub-acid; a good flavor. Begins to bear young. One of the best to plant.

## WINTER APPLES

Arkansas Black - A remarkably large and handsome crimson-black apple; perfectly smooth, roundish flat, lightly dotted with white. The flesh is yellow, juicy and delicious, keeping late.
Baldwin-Large, roundish, skin deep red; flesh juicy, crisp and sub-acid; of a good flavor; very vigorous and productive; is considered a fall apple in the West and South.
Banana-A new and excellent fruit; has a delicate banana perfume; fruit keeps well; color deep yellow, slightly covered with light red blush; is a very large size and showy in appearance.
Ben Davis-Large, roundish, striped red on yellow; flesh white, tender with a mild good, but not rich sub-acid flavor; one of the most profitable winter apples for market; an early and abundant bearer. The leading commercial variety of today.
Black's Annette-Small, roundish; dark red, sometimes considered an autumn apple.
Downing's Winter Maiden Blush-Fruit large to medium, roundish, slightly irregular; flesh white, tinged with yellow, firm, crisp, juicy and mild subacid; color clear, pale yellow with red blush. Tree vigorous and upright, with spreading head.
Dominie-Large and roundish; skin light red, narrow and distinct stripes on lightish yellow ground; flesh white, firm, mild and sub-acid; of a spicy flavor; very productive and keeps through the winter.
E. G. Russet-Medium size, dull russet, with a tinge of red on exposed side; flesh crisp, juicy and high flavored; tree vigorous grower and good bearer.
Gideon-An upright grower, medium tolarge; color yellow, with vermilion blush on sunny side; mild and subacid; quality very good.
Grimes' Golden-Medium; skin rich golden yellow; flesh white, tender, juicy with a peculiar aroma; tree a good grower and an early bearer. A very popular sort.
Gano-Conical, good size and smooth; deep red, shaded on sunny side to mahogany; very attractive; flesh pale yellow, fine grained, pleasant and sub-acid; is a good shipper and keeper. Tree healthy, vigorous and hardy; a prolific bearer.
Huntsman-Large and of rather unequal shape; skin yellow with large distinct dots; flesh yellow, fine grained, juicy, sub-acid and very good. A splendid winter apple.
Iowa Blush-Medium, conical and regular; color yellow, blush red on sunny side; flesh fine grained, juicy and sub-acid.
Jonathan-Medium size, of a deep red color; flesh very tender, juicy and rich; a very productive apple; one of the very best varieties for the table, cooking or market; very popular throughout the West.

## WINTER APPLES, Continued

Janet-Mcdium in size, roundish, approaching oblong shape; color pale red, distinct stripes on yellow ground; flesh nearly white, fine, mild, sub-acid and juicy; growth somewhat slow; a profuse bearer and is considered an excellent winter apple; hardy in the West.
King of Tompkins County-Large. handsome, striped red and yellow; tree vigorous and productive; one of the best sorts.
Lansingburg - Mcdium, roundish; skin yellow, with handsome red cheek; flesh firm, sub-acid and moderately rich; keeps throughout spring.
L. R. Romanite-Mctinm, rather small, roundish; striped and shaded deep red on greenish yellow ground; flesh crisp, milel, sub-acid and of morlerate quality: is considered a long keeper in the West.
Law er-Large, roundish with surface handsomely striped with red; flavor sub-acid and very good. Moderately productive.
Minkler-Medium, rich, sub-acid; very good and long keeper.
Mammoth Black Twig-One of the most profitable and valuable in the market; resembles Winesap, except that it is from one-third to half larger.
McIntosh Red-A very valuable hardy sort; medium size, skin nearly dark red; flesh white, fine and very tender and juicy. A good annual bearer.
Malinda-Grecnish yellow; flesh white, juicy, sub-acid and good.


Banana. (See page 6.)

Arkansas Black. (See page 6.)

Missouri Pippin-Rather above medium size; skin striped with red on pale yellow ground; crisp, sub-acid and very good; keeps throughout the winter.
Milwaukee--Originated in Wisconsin. A seedling of Duchess: fruit is large, with yellow skin, splashed with crimson.
Northwestern Greening - Fruit large and -month: color greenish yellow; flesh fine grained; juicy, firm and a good quality; a good apple for the North.

Northern Spy-Large, roundish, slightly conical; somewhat ribbed and slightly striped; nearly covered with purplish red: flesh mild, tender, with a mild sub-acid and delicious flavor; tree should be kept open by pruning, so as to admit light.
Opalescent-Large size; color light, shading to very dark crimson; flesh yellowish, tender, juicy and good; susceptible of a very high polish, reflecting objects like a mirror.
Pewaukee-Medium to large; skin bright yellow, partially covered with dull red; flesh yellowish-white, crisp and juicy; sub-acid, and quality good: tree strong grower and very hardy.
Peter - Resembles Wealthy in size and color: four to six weeks later; perfectly hardy.
Peerless - Origin, Minnesota. Scason, October to December. Fruit medium to large; yellowish green with stripes and splashes of carmine; flesh yel-

## WINTER APPLES, Continued

lowish white, fine grained; flavor agreeable sub-acid, but not rich. Tree vigorous, upright; comes very slowly into bearing, and but few trees (except the original) have as yet shown ample productiveness; some growers have succeeded in fruiting it by girdling it. Has been much advertised and planted, but its disinclination to bear has excluded it from an important place in the list.
Price's Sweet-Large, greenish yellow, uat shaped apple; tree hardy and productive; said to be superior to Talman's Sweet.
Roman Stem-Medium; color whitish brown, nearly covered with a delicate blush; flavor rich and pleasant; a good dessert apple.
Rhode Island Greening - Large, roundish; color green, greenish yellow flesh, tender, juicy, rich and rather acid; one of the best for cooking and dessert; tree vigorous and prolific bearer.
Stark-Large, roundish; color greenish yellow, shaded and striped with dark red and light brown spots; flesh yellow, moderately juicy, mild and sub-acid; tree vigorous and an early and abundant bearer; a good market fruit.
Salome-Uniform size; quality very good; a very good keeper; tree strong bearer and equals Wealthy in hardiness; an early and annual bearer.
Stayman Winesap-Nedium to large; color greenish yellow, covered with dull red and numerous brown dots; flesh yellow, firm, tender and juicy; quality of the best.


White Winter Pearmain-Medium: skin light yellowish green, with a brownish cheek; flesh tender, fine grained, mild and sub-acid; of an aromatic flavor.
Wisconsin Russet-Medium to large; color greenish russet; surface rather rough; flesh crisp, good sub-acid flavor; productive.
Windsor Chief--Small oblate, greenish yellow, with red splashes and gray dots: flesh pale yellow, fine grained, juicy and sub-acid; tree carly bearer and prolific.
Yellow Newtown Pippin-Medium to large, roundish; color yellow: flesh very firm. crisp, juicy and delicious; sub-acid flavor; tree a slow grower, but fruit a good keeper.
York Imperial-Medium, color white, shaded with crimson; flesh firm. crisp, juicy and of a sub-acid flavor; tree vigorous and a good bearer.
Yellow Bellflower,-Large, yellow with blush on sunny side; very tender, juicy, sub-acid and most excel. lent: tree vigorous and a good bearer.

## CRAB APPLES

As an ornamental fruit, and for jellies, prescrving. etc., the Crab Apple is unequaled. All are very hardy and prolific. Come into bearing when very young and command a ready and profitable market. We name some of the best sorts.
Florence-Large, very handsome and hardy; bears early and profusely.
General Grant-Tree an erect and vigorous grower, fruit in dense clusters; quality excellent. October to December.
Hyslop-Almost as large as eacrly Strawberry apple; deep crimson; very popular on account of its size, beauty and hardiness; tree vigorons.
Large Red Siberian-About an inch in diameter, grows in clusters; yellow, lively scarlet cheek; tree erect, vigorous, bears young and abundantly. September to October.
Lyman's Prolific-Large, red striped; fine for cooking and very hardy.
Martha-Beautiful, glossy, ycllow shaded bright red; good size, mild and tart.
Queen's Choice-Medium, round, bright crimson; flesh white; brisk flavor; tree vigorous and prolific. Late.
Sylvan Sweet. Very large, bright red, juicy and sweet; season early.
Whitney-Large, glossy green, splashed with


Martha Crab.
crimson; flesh firm, juicy; flavor very pleasant; ripens latter part of August; tree a good bearer and very hardy.
Yellow Siberian-Large and of a beautiful golden yellow color; tree vigorous.

## PEARS

Standard pears prefer a strong loam, but succeed well in a great variety of soils, and upon amy land that will produce good crops of vegetables, grain, etc. Pears will keep longer, and their flavor is greatly improved by picking before they are fully ripe. By a judicious selection of varictics, their season can be extended from July to February. One of the most important


Koonce Pear. points in the management of pears is to gather them at the proper time. Summer pears should be gathered at least ten days before they are ripe, and autumn pears at least two weeks. Winter pears, if they will hang so long, can be left until the leaves begin to fall. We cannot urge too strictly the following suggestions: When pear trees are heavily laden, the fruit should be thinned when about one-third grown, clse the fruit will be poor, and the trees injured.

## SUMMER PEARS

Bartlett-Large size, with often a beautiful blush next the tongue; buttery, very juicy and highly flavored; bears early and abundantly. Tree vigorous and very popular.
Clapp's Favorite-Very large; color yellowish green to full yellow when ripe; marbled with dull red in the sun; covered with small specks. Melting and rich; should be gathered early; tree vigorous.
Koonce-Medium; color golden yellow, with red cheek; flesh juicy and buttery.


Bartlett. (See page 9.)

## SUMMER PEARS, Continued

Wilder-Medium to rather small; regular in form, greenish yellow, with a brownish red cheek; melting, sweet and very pleasant; tree a vigorous grower and great bearer.

## AUTUMN PEARS

Beurre D'Anjou-Large, greenish sprinkled with russet, sometimes shaded with dull crimson; flesh whitish, buttery, melting, with high, rich flavor; very productive; tree vigorous.
Duchess D'Angouleme-Very large, dull greenish yellow, streaked and spotted with russet; flesh white, buttery and very juicy, with a rich, excellent flavor; tree vigorous.


Beurre D'Anjou.

Flemish Beauty-Large, beautiful, juicy, melting, rich and fine; bear good hardy fruit everywhere; tree very vigorous.
Garber-Large, irregular; color russet brown. Flesh good.
Howell-Large, light waxen yellow, with fine red cheek! rich, sweet and melting, with a perfumed aromatic flavor; early, profuse bearer; very hardy and valuable.
Kieffer-Very large; pale shade, light yellow when full ripe; sometimes has a blush; flesh white, crisp, juicy and of a slight quince flavor; fair quality; exceedingly valuable for cooking or canning; never rots at the core; tree is a vigorous grower and must be sufficiently pruned; a regular and abundant bearer; extremely vigorous.
Sheldon-Large size, yellow or greenish russet, with a richly shaded cheek; flesh a little coarse, melting, juicy and very crisp; highly perfumed flavor; productive and vigorous.
Seckel-Small; skin a rich, yellowish brown with a brownish red cheek; flesh very fine grained, sweet and exceedingly juicy and melting, buttery and the richest and highest flavored pear known; bears moderate.

## WINTER PEARS

Lawrence-Pear medium size, yellow, tender and melting; quality of the best, and one of the best winter pears known.
President-A variety recently introduced from France; highly recommended for its rich flavor and kecping qualities; very large and handsome, melting and buttery; tree vigorous grower.
Vicar-Large size; long; fine, rich, yellow when fully ripe; very vigorous and productive: one of the best.

## DWARF PEARS

We can furnish the following in Dwarf Pears:

| Anjou | Duchess | Lawrence |
| :--- | :--- | :--- |
| Bartlett | Howell | Seckel |
| Clapp's | Kieffer | Wilder |

## CHERRIES

The cherry thrives best on sandy soil, and there it attains its highest perfection. It will do well in almost any situation, except a wet one. It is one of the most ornamental of our fruit trees, which, with its delicious and refreshing fruit, makes it very desirable in planting near the dwelling, where beauty and shade, as well as fruit is desired. We divide them into two classes, Hearts and Bigarreau, Dukes and Morellos. The former are strong and vigorous growers, making large and open heads. The fruit is large, heart shaped, meaty and sweet. The Dukes and Morellos do not attain so large a size, but are more hardy and less liable to injury from bursting bark. The fruit is usually sour.

## HEART AND BIGARREAU VARIETIES

(Suitable for the East and Far West, but not for the Middle West.)
Black Tartarian-Very large, rich purplish black; are tender, juicy, very rich, exccllent and very productive.
Governor Wood-One of the best cherries; very large, light yellow, marbled with red; juicy, rich, delicious; tree healthy, and great bearer.
and delicious; one of the best and most beautiful and popular of all light colored cherries; tree erect, vigorous and productive.

## DUKE AND MORELLO VARIETIES

Dyehouse-Partakes of both the Duke and Morello in wood and fruit; an early and sure bearer; ripens a week before the Early Richmond, of better quality and quite as productive.

Early Richmond-An early, red, and satisfactory cherry, valuable for cooking early in the season; ripens through June; tree a free grower, hardy, healthy and very productive.
English Morello-Large, dark red, nearly black; tender, juicy, acid and rich; tree dwarf and slender.
Louis Phillippe-Extra hardy and vigorous grower; very productive; large size, rich dark red; flesh red; tender, juicy, with a mild sub-acid flavor.
May Duke-Hardy, well-known excellent variety; large, dark red, juicy, sub-acid and rich; tree hardy, very vigorous and productive; ripens through a long period.
Montmorency, Large-Tiee very hardy and immense bearers commences to fruit while young and is loaded annually with fine crops; fruit very large, fine flavor, and a bright, clear, shining red; valuable everywhere; a week later than Early Richmond; the finest acid cherry.
Olivet-This variety is of the greatest value; fruit large; flesh red, with rose colored juice, tender, rich and vinous with mild sub-acid flavor; is productive as the best of the Duke sorts and probably the best of this class.
Ostheim-Hardy cherry and has been tested in the severest winters of Minnesota and found to be perfectly hardy; fruit large, roundish; flesh liver colored, tender, juicy and almost sweet; a very good sort.
Wragg-One of the best commercial sorts; very hardy, and produces enormous crops; fruit extra large and dark, of the Morello type.

## COMPASS CHERRY-PLUM

A cross between the Sand Cherry and the Miner Plum; originated in Minnesota. The

Cherry-Plum is very hardy and bears the second year from planting; quality of the fruit is fine; color dark red. This plum is well adapted to the vigorous winters of the North and will thrive where almost all other varieties of plum will be killed.

## ROCKY MT. CHERRY

Small, roundish, black, not very sweet; tree small, bushy, not over four feet high; very hardy, bears profusely; worthy of cultivation as an ornamental shrub.

## PLUMS

The plum attains its greatest perfection on a strong clay soil, where it grows the most thriftily, and suffers the least from the curculio and black knot. As is the case in all other fruits, it is greatly benefited by thorough cultivation. Some varieties, especially the native plums, are hardy and can stand the climate of the extreme North. Plums should be sufficiently pruned to prevent straggling growth, and to prevent the head from being too crowded. They should be thoroughly cultivated and not allowed to stand in the grass.
preserving and dessert; a long keeper; tree vigorous.


German Prune Plum.
Shippers' Pride - An unusually profitable grower and extremely hardy, very productive; fruit of a large size and nearly round; color a dark purple; quality fine, juicy and sweet; excellent for canning and is an unusually good shipper. A splendid market plum.
Shropshire-A variety of great merit for preserving. Tree vigorous, hardy and abundant bearer; flesh amber colored, juicy and spicy.

## NATIVE VARIETIES

Cheney-Large, roundish-oblong; color dull purple red; skin thick; flesh firm, sweet and good; ripens in August. Cling.
De Soto-Medium to large, round-ish-oblong; marbled, red, with slight purplish green; flesh orange colored, firm, juicy and of good quality. Cling.
Forest Garden - Large, color orange yellow, overlaid in dotted red; flesh moderately firm, orange color, juicy and good; valuable for home use. Cling.

## EUROPEAN VARIETIES

Bradshaw-Fruit very large, dark violet red; flesh yellowish green, juicy and pleasant; very productive; one of the most profitable for the market; of fine appearance and brings a good price; tree vigorous.
German Prune-Medium, oval; purple or blue; rich, juicy and of fine flavor; tree vigorous and very productive.
Green Gage-Small, but of highest excellence; tree a moderate grower; ripens about the middle of August.
Lombard-Medium size, roundish-oval; violet red, juicy, pleasant and adheres to the stone; a valuable market variety; one of the most hardy and popular; peculiarly well adapted to light soils; nearly always produces a crop.
Moore's Arctic-Fruit grows in large clusters; large, dark purple; flesh very fine, both for


Hawkeye. (See page 13.)

plum trees of an abundance of pollen planted near it.
Wolfe-Medium large and round; color yellow mottled red; flesh yellow, firm and of a good fuality; irec strong grower, prolific; free.
Wyant-Medium, roundish oblong; color purplish red; flesh very firm; free.

## ORIENTAL PLUMS

Abundance-The popular new Japanese fruit; tree thrifty, hardy and beautiful; fruit large, showy and good; richly perfumed.
Burbank - Fruit medium to large; skin orange yellow dotted and marbled with red, deepening to a cheek; flesh meaty, yellow, sweet and good; splendid for canning; also a good market plum.

## NATIVE PLUMS, Continued

Hammer-Medium to large; color crimson, with yellow dots, blue bloom, stone small; season medium to late; tree is hardy and productive, bearing large quantities of fruit.
Hawkeye-Large, roundish-oblong; color purplish red; flesh firm and good. Cling.
Pottawattamie-Medium, round, red streaked with yellow; flesh firm; very juicy and fair quality; tree very productive.
Stoddard-Medium to large, round, yellow nearly covered with dark red; flesh yellow, juicy, sweet and good; similar to Hawkeye, but carlier. A valuable sort.
Surprise-Large, oval; dark red, very meaty: one of the very best sorts: medium early: bears well.
Weaver - I, arge, purple, with blue bloom: very prolific; a constant and regular bearer and of a good quality; very hardy and seldom injured from even our most severe winters.
Wild Goose-Medium, round, light bright red; skin pink and shining; flesh yellow, pulpy and sweet and juicy when ripe; popular variety, but a poor self fertilizer; should have other


Burbank

## PEACHES

The ease with which peach trees may be cultivated, their freedom from disease, the short period before they become productive, with the immense demand for the fruit, and the facility with which it may be shipped to distant markets, makes peach growing extremely profitable. To secure healthy, vigorous and thrifty trees, the ground must be kept clean and mellow, and should receive an occasional dressing of fertilizer. It should be remembered that peaches are borne on the wood of the previous season's growth, and this makes it absolutely necessary to prune the trees yearly. Remove the dead branches, and keep the trees in good shape to produce bearing wood.

Admiral Dewey-Skin deep orange yellow, with crimson cheek; flesh clear yellow, of uniform color and texture to the stone; juicy, melting, quality; ripens with Triumph; tree hardy and productive. One of the best early freestones.
Alexander-Medium size; skin greenish white, nearly covered with rich red; flesh melting, juicy and sweet; tree vigorous and productive. Cling; early.


Chinese Cling—Large; skin transparent creamy color, with cheek of red next the sun; flesh creamy white; very sweet and juicy; cling.
Coolidge-Rather large, roundish; skin nearly white, mottled with red dots in the shade, and deep scarlet cheek; flesh very melting and juicy, with a rich, faintly acid flavor; valuable for home use only.
Crawford Early-A magnificent large yellow peach of good quality; tree vigorous and very productive; its fine size, beauty and productiveness makes it one of the best and most popular sorts; free.
Crawford Late-Large, skin yellow or greenish white, with pale red cheek; flesh yellow; tree vigorous, moderately productive; one of the finest late sorts; free.
Crosby-In every respect a remarkably fine peach for home use or market; ripens just before Crawford's Late; extremely hardy.
Early Rivers-Large; color creamy white with delicate pink cheek, flesh melting, with rich, racy flavor; one of the best of all peaches for home use or nearby market; cling.
Elberta-The great market peach of the South and Southwest. It is perfectly hardy in the North, and is believed by the most extensive fruit growers to be one of the very best for home use and market; color lemon yellow, blush on sunny side; flesh pale yellow, tender and juicy; tree vigorous. A good shipper; free.
Greensboro-The best and most beautifully colored of the extra early peaches: ripens with Early Rivers; flesh white, juicy and excellent;
Bailey-Small, hardy; ripens late; very productive; almost always sure of a crop. Cling.
Bokara No. 3-Large fruit, yellow with red cheek; has excellent keeping qualities; free.
Carmen-The new hardy peach; nearly as choice and fine as the Elberta; skin pale yellow, with blush on sunny side; flesh white, tender, sweet and melting. A good shipper; free.
Champion-Very hardy; skin nearly white, with red cheek; a very handsome peach; extremely hardy and productive; flavor is delicious, sweet and juicy. A good shipper; free.
free.
Hale's Early-Medium size, greenish white, with red cheek; fine quality; tree healthy and good grower; productive; cling.
Heath Cling-Large, oblong; creamy white, slightly tinged with red in the sun; very tender, juicy and melting. One of the best sorts; cling.
Hill's Chili-Tree very hardy. Strong grower and great bearer; flesh excellent; free.
Lemon Cling-Very large, oblong; having a swollen point, similar to a lemon; skin yellow, with red cheek; flesh yellow, firm, juicy and sweet.

## PEACHES, Continued

Old Mixon Cling-Large pale yellow, with red cheek; juicy, rich and of a high flavor; one of the best clingstone peaches.
Old Mixon Free-Large pale yellow, with a deep red cheek; tender, rich and good.
Russell No. 1-Large size, roundish oblong. The earliest freestone to ripen. Flesh greenish white with yellow veins. Stone small in proportion to size of peach. Texture melting and juicy. Flayor pleasantly sweet with little aroma and vinous flavor. Resembling Alexander somewhat in color. Originated at Wymore, Nebraska. Season August 1st to 15 th .
Salway-Fruit large, roundish, deep yellow, with a rich marbled brownish cheek; flesh yellow, firm, juicy and sugary; free.
Sneed-The earliest peach known. Ripens ten days before the Alexander; fruit creamy white, well colored with deep crimson; ripens well on the trees; quality not very good, but very productive and valuable on account of its extra earliness; cling.
Triumph--One of the early sorts; fruit good size, yellow with crimson cheek; flesh yellow; almost a freestone.
Wonderful-Large, uniform in size and shape; color rich golden yellow, overspread with vivid crimson; flesh yellow, rich, high flavored and delicious; bright red at tip, which is small; is almost free.


Elberta. (See page 14.)
Yellow St. John-Medium large, round; orange yellow, with red blush on sunny side; flesh tender, juicy and very good; free.
Wheatland-Large, roundish, skin golden yellow, shaded with crimson on the sunny side; flesh yellow, rather firm, juicy, sweet and of fine quality; tree vigorous; free.


Apricots. (See page 16.)

## QUINCES

The quince crop is reliable and not easily destroyed by variations in the weather. Trees are hardy and productive, easy to prune and spray, and diseases and insects, while rather numerous, are held in check with comparative ease, with the single exception of pear blight. The land should be retentive of moisture, but not wet and soggy.

Angers-This varjety is cultivated as stock for the pear; fruit is pear-shaped, golden yellow; tree a vigorous grower, and has large leaves.
Bourgeat-Bright golden yellow; large, handsome, showy fruit; a good keeper; tree vigorous grower.
Champion - Greenish yellow fruit; large, distinctly pear form; furrowed about the top; flesh tender, delicate flavor; bears abundantly, and is also ? good keeper.
Meech's Prolific-Bright orange, with thin fuzz; fruit large, somewhat shaped like an apple; very fragrant and good flavor; bears young and is productive.

## NECTARINES

The nectarine requires the same culture, soil and management as the peach, in which it differs only in having a smooth skin, like the plum.

Boston-Large, yellow, with red cheek; flesh yellow and sweet, and of pleasant flavor; freestone.

Downton--Large, greenish white, with dark red cheek; flesh greenish white, rich, high flavored; one of the best; freestone.

## APRICOTS

This beautiful and excellent fruit needs only to be known to be appreciated. It ripens a month or more before the best early peaches, and partakes largely of their luscious flavor. The tree is even more hardy than the peach, and requires about the same treatment.

Early Golden-Small, pale orange; flesh orange, juicy and sweet; tree hardy and productive; separates from the stone.
Royal-Rather large, round-oval, slightly compressed, pale yellow, faintly reddened to the sun; flesh yellow orange, sweet, juicy and high flavored; a profitable market variety.

## RUSSIAN VARIETIES

Alexander-Very large, oblong yellow flecked with red; flavor sweet and delicate.
Alexis-Large, yellow, red blush; subacid, rich and good. Does well in the West.
Gibb-Nedium, roundish-oval and somewhat flattened; fruit light yellow, juicy and good; ripens early.
J. L. Budd-Large size, white, with red cheek; sweet, juicy; very fine, and the best late variety.

## Vines and Bush Fruits GRAPES

The cultivation of this fruit is so simple that no one need fail to obtain a good annual crop, if good care is taken and proper selection made. When space is limited, they can be trained on fences, over doorways and arbors. They are especially desirable for planting in city lots, or village gardens. When the selection is made to include some of the early varieties, as well as those that do well for winter keeping, it is possible, therefore, to have grapes on the table during several months of the year.

## BLACK

Campbell's Early-The king of American grapes; a very strong, vigorous, hardy vine, with thick, healthy, mildew-resisting foliage and self-fertilizing blossoms; always sets its fruit well, and bears abundantly.
Champion-A large grape of medium quality; very early, and is a valuable sort to plant where the seasons are short.
Concord-A large, handsome grape; very hardy, productive and reliable; succeeds well throughout a great extent of country, and is one of the most popular mar. ket grapes.
Ive's-Bunch medium to large, sometimes shouldered; quite compact; flesh sweet, pulpy and somewhat foxy; should hang some time on the vine after it colors; hardy, vigorous and bears well; an early sort.

Moore's Early-Bunch medium, berry quite large; color black, with heavy blue bloom: its extreme hardiness and size renders it a popular market sort.

Worden-Ripens a few days earlier than the Concord; bunch large and compact; berry large, black and of a good quality; tine vigorous and productive.

## RED OR AMBER

Agawan-One of the best of the red varieties: bunch varies in size: flesh tender and juicy; vine a good grower and bearer.

Brighton-Resembles the Catawba in color. size and form of bunch and berry; flesh rich, sweet and of the best quality: ripens early; vine productive and vigorous in some localities it is subject to mildew.
Delaware--One of the finest of the red sorts; the rine is comparatively slender, but grows freely and is perfectly hardy; ripens early; bunches small and compact; berries bright red, with a violet bloom; sweet, sugary, with a musky aroma.
Salem-Bunch large and compact; berry large, round and coppery red; flesh tender and juicy; one of the best; vine is healthy, vigorous and productive.
Woodruff-Bunch large and somewhat shouldered; berry large, red and one of the best.
Wyoming-Ripens with the Delaware; light red, early; vine strong grower and hardy.

## WHITE

Diamond-Moderately vigorous, productive and hardy; bunch large and compact; berries large yellowish green, juicy and melting.
Martha-One of the most reliable white grapes; bunch medium, compact and shouldered; berry white or whitish green; turning to pale yellow when fully ripe; skin thin; flesh very sweet and juicy, ripens a little earlier than Concord.
Niagara-Bunch medium to large and compact; occasionally shouldered; berry large,


Brighton
round and uniform; skin thin but tough. pale green at first, changing to pale yellow when fully ripe, with thin whitish bloom; flesh slightly pulpy, tender and sweet, vine remarkably vigorous, healthy and hardy. One of the most valuable white grapes in cultivation.

Pocklington-A seedling of the Concord: bunch medium to large; berry large, roundish, light golden yellow when fully matured; flesh pulpy, juicy and of a fair quality; ripens early; vine hardy, vigorous and productive.

## GOOSEBERRIES

This fruit is useful for cooking when green or ripe, and may be canned with much facility. It is cultivated extensively for both home and market use.
Champion-Bush vigorous, very free from mildew; berries medium, round, smooth, greenish white, with thin almost transparent skin; quality good, ripens early. A valuable sort.
Downing-Medium to large, oval; pale green and good quality; bush upright and produc-tive;- of strong, healthy growth; very spiny.
Houghton-Fruit small, oval; about threefourths of an inch long; skin smooth, thin and glossy; a pale dull reddish brown, marked with faint greenish lines; flesh tender, sweet and pleasant. A profuse bearer, free from mildew; easy of cultivation.
Industry-Very large, oval; dark red; hardy, vigorous upright grower and very prolific; season early. One of the best known, and one of the most successful varieties.
Josselyn-Large size, smooth, prolific, hardy; of the best quality; a wonderful cropper, with bright green, healthy foliage.
Pearl-An exceedingly prolific variety of vigorous growth; free from mildew; productive. same color as Downing.
Smith's Improved-Large oval; light green, with bloom; flesh moderately thin, sweet and good; vigorous grower.


Niagara. (See page 17.)

## CURRANTS

This fruit ripens just before raspberries are gone, and continues in prime order for several weeks. There is no more useful fruit than the currant, and it is one of the easiest to cultivate. Being perfectly hardy, they do not suffer from injury during the winter.

Black Champion-Large, black; a most excellent variety. Cherry-One of the largest red currants; bunches short; plant vigorous and productive.
Fay's Prolific-A popular red currant; fruit very large and handsome.


Perfection Currant. (See page 19.)


## CURRANTS, Continued

La Versaillaise-A French variety, resembling the Cherry; very large size, great beauty and productiveness.
Long Bunch Holland - Bunch long, well filled; berries medium to small and bright red; quality good; bush unusually vigorous and holds foliage well; popular in many parts of the West.
London Market-Bunch medium long, berries large, light crimson, resembling the Fay; sharp, acid and good.
North Star-Berries medium size, on long stem; bright crimson; mild and rich, very hardy; bears early and profusely; more valuable for home use than for market.
Perfection-Bunch long, bright crimson and thick clusters; of splendid bearing qualities, size and flavor.
Pomona-A long red currant of good size; very productive, sweet and of excellent quality.
Red Dutch-An old, well-known sort; berry of medium size and good quality; bunch long, plant an upright grower and very prolific.
Victoria-Large, bright red; bunches very long; late, productive and valuable sort; plant an erect grower.
White Grape-Very large, mild and excellent. The best table variety; quite distinct from White Dutch.
Wilder-A red currant; fruit large, fine flavored. Splendid bearer, very profitable for market.

## RASPBERRIES

Coming immediately after strawberries, when there is a dearth of other fresh fruits, raspberries are equally desirable for planting in the garden for home use and in the field for market. Bush is easily cultirated, the season of ripening is long, they bear transportation well, and besides the demand for immediate consumption, it brings good prices for drying and canning. Plant in good soil, in hills not less than four feet

Fay's Prolific.
(See page 18.) apart each way, with two or three plants to a hill. Cut out the old and weak shoots each year. To guard against injury by the winter, the canes may be tied to stakes and covered with straw, or laid down in the fall and covered with a few inches of earth, leaves, etc.
Cardinal-The leading horticulturists who have seen this berry say it is one of the wonders of the century. It is of great vigor and exceeding productiveness; fruit is red, rich and very highly flavored.
Columbian-Fruit dull purple, very large, and moderately firm. A good market berry and one of the best for canning; bush remarkably strong and wonderfully productive.
Cuthbert-Canes strong, upright, very vigorous: fruit large to very large, red, moderately firm, with high flavor; very productive. Is a good market sort.
Cumberland-Black, very large, very similar to Gregg in quality and firmness; very hardy and productive. One of the best mid-season market varieties.
Golden Queen-Resembles the Cuthbert in hardiness. A vigorous grower to plant. Fruit of large size; color beautiful yellow; flavor excellent.
Gregg-This is one of the largest and best of the black cap family; fruit large, black, with slight bloom; flesh quite firm, moderately juicy, sweet and rich; ripens late and very evenly, making the season short; a very strong grower and good bearer.
Haymaker-An enormous producer; fruit a little more acid and is later than the Columbian; one of the most productive raspberries.


## RASPBERRIES, Continued

Kansas-Black; berries as large as Gregg, and better color; very little bloom, of the best quality, and ripens early; strong grower and immensely productive.
King-Very large, bright red; vigorous and productive.
Loudon-Dark crimson; large, firm and of a good quality. Very productive and hardy and vigorous.
Marlboro-Large, roundish, conical; quite firm; red and of moderate quality; vigorous, productive and hardy.
Miller-Large, round, brilliant red; prolific and hardy; early.
Older-Medium, round, black, firm, juicy. Very prolific and quite hardy.

## IMPROVED DWARF JUNE BERRY

In appearance and quality it strongly resembles the huckleberry. The fruit is reddish purple in color, changing to bluish black, and is borne in clusters; the flavor is rich, sub-acid and excellent for dessert or canning. The plant attains about the same size as the currant, very easy to cultivate and extremely hardy.

## BLACKBERRIES

Blackberries are among the best known and most valued of our ber-
ries. No fruit of any kind is more wholesome. A liberal use of berries and other good fruit will save doctors' bills. Blackberries should be planted in rows six to seven feet apart, three to four feet in the row. Keep the ground light, rich and clean, and pinch the canes back when they have reached four feet in height. The demand for blackberries is always good.
Ancient Briton - Large, oblong, sweet and very good; bush a sturdy grower, hardy and one of the most productive; one of the best sorts for the Middle West. Early Harvest-One of the earliest, berry medium sized, good quality and very prolific; firm and attractive in appearance. A good market sort.
Eldorado-Vine is vigorous and hardy; berries are very large, black, borne in clusters: ripens well together; swect, melting and pleasing to the taste.
Erie-One of the very best large new blackberries; absolutely hardy, very black, firm and solid; ripens early.
Kittatinny-Large, sometimes one and one-half inch in length; glossy black; flesh moderately firm, sweet, rich and excellent; canes are vigorous and hardy; very productive.
Minnewaska-Fruit large, nearly round, juicy and sweet; very productive.


Cumberland. (See page 19.)


Snyder. (See page 21.)

## BLACKBERRIES, Continued

Rathbun-A strong, erect grower and hardy; fruit is sweet, luscious, without a hard core; high flavor; jet black, small seeds; firm enough to ship and handle well. One of the largest sized berries.
Snyder-The hardiest blackberry known; fruit medium sized and of a good quality; a standard market varicty.
Stone's Hardy-A vigorous grower. Rerry glossy black and of a good flavor. A little later than the Snyder; very hardy.
Wilson-Very large, black and of good quality; very productive.

## LUCRETIA DEWBERRY

This is one of the finest of its class; a strong grower, exceedingly productive. It really is a new trailing blackberry, and is worthy of general planting. Set the plants two feet apart in the row, and cover in winter with coarse litter. Mulch the plants in the spring, thus keeping it off the ground.

## STRAWBERRIES

First of all the small fruits comes the beatttiful, wholesome strawberry, and the profits resulting from its wise cultivation will satisfy any reasonable expectation. Plant in March and April, September and October, in good soil, deeply worked and well manured, with leaf mold, wood ashes or bone dust. Set fifteen inches apart in rows three feet apart for field culture, and 15 to 18 inches each way for garden culture. Keep runners out and cultivate clean. Mulch late in the fall and uncover early in the spring, drawing about the plants to keep the fruit from coming in contact with the ground.


Gandy.


## Lucretia Dewberry.

Bederwood (Per.) -This is a very desirable carly berry, and is in every way healthy and vigorous, and an enormons yielder. The berry is of large size and roundish, bright scarlet and of regular form.
Bubach (Per.) -Fruit is uniformly large and handsome, conical, moderately firm and of fair quality; valuable for home use and nearby market.
Crescent (Per.)-Medium, uniform and conical, bright scarlet; plants are wonderfully rank growers. Succeeds in all soils.
Clyde (Per.) - A good all-round berry, about the same size as Bubach, but a little earlier and much firmer. Berries are large; a splendid producer.
Gandy (Per.) - Fruit is uniformly large, bright red, firm and of first quality. Is valuable as a shipper. One of the best late varieties.
Glen Mary (Per.) - Fruit is large to very large and very productive; strong and healthy grower; highly colored; firm for a large berry and ranks with the best in flavor.
Haverland (Per.)-Berries are large, long and bright red; a prolific bearer. Plants are strong and healthy.

## STRAWBERRIES, Continued

Jessie (Per.)—Very large, often wedge shaped; bright scarlet. Requires rather careful cultivation.
Nick Ohmer (Per.)-Rather large, conical, bright crimson; firm and very good. A very handsome bérry.


Senator Dunlap.

New York (Per.)-Berry extremely large and well formed, blood red, with shiny surface, meaty and rich; flavor mild and delicate. Plant is an upright grower and very productive.
Parker Earle (Per.)-A splendid berry; originated in. Texas; bears uniformly, large, regular and conical; color bright scarlet, ripening to the tip; no hollow core. Plant extremely vigorous and enormous producer. one of the very best sorts.
Rough Rider (Per.)-Berry medium to large, of a rich crimson color, juicy and rich. Plant very productive and is a splendid shipper.
Senator Dunlap (Per.) - Fruit of large size, regular in form, deep red in color; firm and excellent quality. Season early and continues in bearing nearly a month.
Sample (Imp.)-A valuable late variety; very firm for so large a berry; color crimson and of a good size; an all-round excellent plant and very productive.
Splendid (Per.)-Berry large and nearly round, bright red color, and a good shipper; flesh near edge a bright red, shading to creamy white at center. Has long fruiting season.
Warfield (Imp.)—Plant vigorous, with long, penetrating roots to resist drouth; blossoms and ripens with Crescent. Has tall leaves which protect the blossoms from spring frosts.

## ASPARAGUS

This delicious and healthy vegetable is to be found in every garden. Nothing can be more easily grown and no plant gives such a healthful food for such little outlay. Set in the fall or spring with the crown of the plant about three inches below the surface of the ground. Ten to twelve inches by two feet is a good distance to plant.

Barr's Mammoth-The largest of all, is very early, and quite tender and delicious; light color. The yield is simply enormous.
Conover's Colossal-A standard kind of first class quality. Tender and high flavored; valuable market and garden sort.
Columbian Mammoth White-This variety is cf excellent quality, produces shoots that are very white, and will remain so as long as they are fit to use.

Giant Argenteuil-This variety was originally a selection from imported French stock, but it has been both acclimated and improved, and superior to the original stock; is superior to many of the other varieties in earliness and productiveness and size of stalks produced.
Palmetto-Extensively grown for market on account of earliness, large size and fine appearance.

## RHUBARB OR PIE PLANT

This very desirable vegetable comes early in the spring. The large stems of the leaves are used for pie making and stewing. It is also valuable for medicinal purposes. A deep, rich soil is indispensable to secure large, heavy stalks. Plant in rows four feet apart, with the plants three feet distant. Set so that the crowns are about one inch below the surface. Top dress in the fall with stable manure and fork under in the spring.

Linneaus-This is a very large variety, fine quality; early; produces a fine, even product in cooking.

Mammoth-This is a very large sort; early, tender and fine flavored; very tender and mild; stalks will sometimes reach three feet in length, and more than two inches thick.

## NUT TREES

American Sweet Chestnut-Well known native variety; a stable tree with broader leaves than the Spanish, and producing smaller fruit; when in full bloom, one of the handsomest trees
Black Walnut-Another native species of great size and majesty; bark very dark, deeply furrowed; foliage beautiful, each leaf being composed of from 13 to 17 leaflets; nut, round.
Butternut-A native tree of medium size, spreading head, reddish colored dark foliage; very thick; nut oblong and rough.
Japan Walnut-Perfectly hardy, rapid grower, handsome form, with immense leaves; bears young and abundantly. One of the finest ornamental trees. Nuts similar to butternut with smooth, thimner shell.


## Ornamental Department

Hardy Shade and Ornamental Trees



In issuing this new edition of our descriptive catalogue of Ornamental Trees, Evergreens, flowering shrubs, etc., we may say that the increasing demand for this class of stock has induced us to make this branch a prominent feature of our establishment. It should be kept in mind that with ornamentals, as with other trees, there are some that do well in one place that will fail in another, so that care should be taken in making itp a selection, to choose only such as are known to succeed in the particular locality where they are to be planted. We have with great pains secured both at home and abroad, valuable, hardy material, so as to render our assortment of this class as complete as possible. Our stock is in the best possible condition for transplanting, having plenty of room where growing, and in soil eminently suited to the development of good roots. With careful planting and proper care afterwards, there should be but little danger of failure.

WHEN TO PLANT-Deciduous Trees, Shrubs and Vines can be planted either in spring or fall. Spring is the best time.

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

PREPARATION OF THE TOP-This consists in cutting back the top and side branches in such a way as to correspond with the more or less mutilated roots, as follows:

Trees with branching heads should have the small branches cut clean out, and the larger ones, intended for the framework of the tree, cut back till within two or three buds of their base. In cases where there is an abundant root, and small top or few branches, the pruning need be very light; but where the roots are small and the top heavy, severe pruning will be necessary. These remarks are applicable to all Deciduous Trees and Shrubs. Evergreens seldom require pruning, but Arbor Vitae and other evergreens planted in hedge rows may be advantageously shorn immediately after planting.

PRUNING-As practiced by some people, has the effect to render trees and shrubs unnatural and inelegant. We refer to the custom of shearing trees, particularly evergreens, into cones, pyramids and other unnatural shapes. Every tree, shrub and plant has a habit of growth. peculiar to itself, and this very peculiarity is one of its beauties. If we prune all trees into reginlar shapes, we destroy their identity. The pruning knife, therefore, should be used to assist nature, and handled with judgment and care; to top off straggling branches, to thin the head of a tree which has become too dense, and to remove dead wood. Sometimes it becomes necessary to prune severely to keep a tree from attaining too great size.

SHEARING-May be practiced on hedges, but never on trees or shrubs.
PRUNING SHRUBS-Many persons train and shear them into regular shapes, imagining that regular outline adds to their effect and beauty. While symmetry and regularity of form are to be admired in a shrub, this quality should never be gained at the expense of health and natural grace. Each shrub has peculiarities of habit and foliage, and we should aim to preserve them as far as possible. Judicious pruning to secure health and vigor is necessary, but trimming all kinds of shrubs into one form shows a lack of appreciation for natural beauty, to say the least. Wiegelias, Deutzias, Forsythias and Mock Orange flower on the wood of the preceding year's growth, hence these shrubs should not be pruned in winter or spring, but in June, after they have finished flowering, when the old wood should be shortened or cut out, thus promoting the growth of the young wood, which is to flower the following season.

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

The Hydrangea Paniculata Grandiflora should be severely cut back and thinned early in spring.

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

## ACER Maple

Ash-Leaved Maple, Box Elder (A. Negundo) A rapid-growing variety, with handsome light green foliage and spreading head. Very hardy, and succeeds in many sections where other varieties do not thrive.
Norway (A. Platanoides)-A native of Europe; has a large, compact body, with a broad top: green foliage; one of the most desirable species for streets and lawns.
Purple Leaf (A. var. Schwedleri)-Its beautiful leaves attract attention at all seasons of the year, but are especially fine in spring, when their gleaming red and purple contrasts brightly with the delicate green of other trees; in mid-summer they are purplish green and in autumn golden yellow.
Silver Maple (A. Dasycarpum)-A hardy, rapidgrowing native tree of large size. Valuable for producing thick shade.
Wier's Cut-Leaved Silver Maple (A. var. Wieri Laciniatum) -One of the best cut-leaved trees, of rapid growth. It is very useful for lawns, etc.; young shoots are tender and drooping.


Norway Maple. (A. Platanoides.)

## MAPLE TREES, Continued

Sugar or Rock (A. Saccharinum) - A very popular American varicty, and its stately form and fine foliage rank it among the very best, both for lawns and streets.

## AESCULUS Horse Chestnut

Ohio Buckeye (A. Glabra)-A native of the Western states, forming a large-sized tree; leaves smooth, flowers yellow; blooms before the others.
European White Flowering Horse Chestnut (A. Hippo-castanum)-This well known species forms a large-sized tree, of handsome, regular outline; is very hardy and free from all diseases. In May is covered with erect panicles of white flower, lightly marked with red; as a lawn tree or for the street, it has no superior.

## AILANTHUS

## Chinese Sumach; Tree

 of HeavenA lofty, rapid-growing tree, with long, elegant foliage; very useful to produce tropical effects.

## BETULA Birch

Cut-Leaved Weeping Birch (B. Pendula Laciniata)--One of the most popular of all weeping pendulous trees; graceful drooping branches, silver white bark, and delicately cut foliage ; one of the most beautiful lawn trees.
European White Birch (B. Alba)-A graceful tree, with silver bark and slender branches; quite erect when young, but after four or five years' growth assumes an clegant drooping habit, making the tree very effective in landscapes.

## CATALPA

Chinese Catalpa (C. Bungei) - A species from China of dwarf habit, growing from over three to five feet high; foliage large and glossy; a shy bloomer; top grafted on tall stems. It makes an effective umbrellashaped tree.
Hardy or Western Catalpa (C. Speciosa)-A variety which is said to have originated in the West. It is finer and hardier than the common, hence better adapted to forest and ornamental planting. It is also a very early blermer.

## CELTIS Hackberry-Nettle Tree

Hackberry-Nettle Tree (C. Occidentalis)-A rare native tree; numerous splendid branches spread out horizontally, and thick rough bark: leaves about the size and form of the apple, but more pointed, and a bright, shiny green.

## CERCIS Red Bud—Judas Tree

Judas Tree, Red Bud (C. Canadensis) - A very ornamental native tree of medinm size: irregular, rounded form, with heartshaped

leates, of a pure green color; glossy surface above and grayish green beneath. The tree derives its name from the profusion of delicate reddish-purple flowers, with which it is covered before the foliage appears. They descrve to be classed among our finest ornamental trees.

## CRAETAEGUS Thorn

Paul's Double Scarlet Thorn (C. Oxyacantha Coccinia Flora Pleno Paulii)-A tree with fine habit, with rich, luxuriant foliage; flowers unusually large, of a deep crimson color, with scarlet shading; very double.

## THORN, Continued

Double White Thorn (C. Oxyacantha Flore Alba Pleno.)-Has small white flowers; highly ornamental variety on account of both foliage and flowers. Makes a striking contrast when planted with the Double Scarlet.

## DIOSPYROS

Persimmon (D. Virginiana)-This makes a very handsome ornamental tree, with large rounded head and thick foliage; fruit is very palatable, if allowed to remain on the tree exposed to early frosts.

## FRAXINUS Ash

American White Ash (F. Americana)-A rapid growing native tree, valuable for planting along streets or in parks. May be exten. sively planted for timber, and is especially valuable in the manufacture of agricultural implements.

## GLEDITSCHIA Honey Locust

Three-Thorned Honey Locust (G. Tricanthos) - A rapid growing native tree with powerful spines and delicate foliage; very useful for hedges.


Hardy or Western Catalpa. (See page 25.)

## GYMNOCLADUS

Kentucky Coffee Tree (G. Canadensis) - A fine native tree of secondary size; rapid, upright growth, with rough bark; stiff blunt shoots and feathery foliage of a bluish green color.

## LARIX Larch

European Larch (L. Europea) A native of the Alps and the south of Europe; an elegant, rapid growing pyramidal tree, valuable for timber; small drooping branches.

## LIRIODENDRON

Tulip Tree (L. Tulipifera)-A magnificent tree of tall, pyramidal habit, broad, glossy fiddle-shaped leaves, of a light green color, with beautiful tulip flowers.

## MORUS Mulberry

Russian Mulberry (M. Tatarica) -Largely planted for screens and wind brakes; fruit, which is rather small, is greatly appreciated by birds and domestic fowls.

## FAGUS Beech

American Beech (F. Ferruginea)-One of the finest American trees.
Purple or Copper Beech (F. Sylvatica-Pur-purea.)-One of the largest of this class; a beautiful tree, attaining a height of 60 to 80 feet.

Rivers Blood-Leaved Beech (F. Sylvatica Purpurea Riversii) - This variety differs from the ordinary Purple-leaved Beech by its compact, symmetrical habit of growth, and crimson foliage in the spring, changing to a dark purple in summer.

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

## PLATANUS Sycamore Plane Tree

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

Oriental Plane Tree ( P . Orientalis) - Attains a height of 40 to 50 feet, and is similar to the above. It is largely planted for its valuable shade qualities.

## POPULUS Poplar

A native species of remarkably luxuriant growth, with large, glossy foliage.
Carolina Poplar (P. Monilifera) -Pyramidal in form and robust in growth; leaves large, glossy, serrated, pale to deep green; valuable for street planting and a very rapid grower.
Golden Poplar (P. Aurea van Geertii)-Has a fine golden foliage, retaining its brilliancy throughout the season; very effective planted in masses.
Lombardy or Italian Poplar(P. Nigra Italica, Fastigiata) -Attains a height of 100 to 150 feet; well known and remarkable for its erect, rapid growth, and tall. spiry form; indispensable in landscape gardening to break the ordinary outlines of most other trees.
Silver-Leaved (P. Alba)-A trec of wonderfully rapid growth and spreading habit; leaves large, rich dark green above and white beneath.
PYRUS Crab

Bechtel's Double Flowering Crab (P. Angustifolia) - One


Double Scarlet Thorn. (See page 25.)


Rivers Blood Leaved Beech. (Sce page 26.)
of the most beatiful of many fine varicties of flowering crabs; tree of medium size, covered in early spring with large, beautiful, double fragrant flowers, of a delicate pink color. A great acquisition to a lawn; blooms when quite young.

## QUERCUS Oak

Pin Oak (S. Palustris)-Foliage deep green, finely divided; assumes a drooping form when it acquires age. One of the most valuable for street planting.
Red Oak ( $Q$. Rubra) -An American species of large size and rapid growth; foliage purplish red in the fall.
Scarlet Oak (Q. Coccinea) - A native tree of rapid growth, pyramidal outlines ancl especially remarkable in autumn, when the foliage changes to bright scarlet.
White Oak (Q. Alba)-One of the finest American trees, of large size and spreading branches; leaves lobed, pale green above and glaucous beneath. Makes an immene tree.

## ROBINIA Locust

Black or Yellow Locust (R. PseudoAcacia) - A native tree of large size and rapid growth; is quite valuable for timber; also makes a very ornamental tree. The flowers grow in long racemes and are quite fragrant. Blooms in June.

## SALIX Willow

Common Weeping (S. Babylonica)-A beautiful tree with long, slender, drooping branches, very graceful, and is a decided ornament to the lawn.
Golden Willow (S. Vitellina Aurantiaca) -A showy variety, conspicuous at all seasons, and especially so in winter, on account of its yellow bark.
Kilmarnock Weeping Willow (S. Caprea Pendula)-A distinct variety, having reddish shoots and large, glossy foliage; hardy and of vigorous growth. Umbrella shaped head, with branches drooping to the ground.
Laurel-Leaved Willow (S. Pentandra Syn. Laurifolia)-A fine ornamental tree, with large, shiny leaves.
Thurlow's Weeping Willow (S. Elegant-issima)-Tree has spreading habit and large crown; branches long and pendant, leaves yellowish green, sometimes blotched with brown.
Wisconsin Weeping Willow (S. Dolorosa) - Of drooping habit and beautiful form. The most hardy of all of our weeping willows.


Weeping Mulberry. (See page 26.)


Tulip Tree. (Sce page 26.)

## SORBUS Mountain Ash

European Mountain Ash (Sorbus Pyros, Aucu_ paria)-A small tree, with shining pinnated leaves; covered from mid-summer to winter with white flowers, followed by clusters of bright red fruit. Tree is of upright, stocky growth.
Oak-Leaved Mountain Ash (S. Quercifolia)-A hardy tree of pyramidal habit; foliage bright green above and downy beneath. Makes a very fine lawn tree.
Weeping Mountain Ash (S. Pen-dula)-Of rapid growth and decidedly pendulous and trailing habit.

## TILIA Linden

American Linden or Basswood (T. Americana)-Grows 50 to 60 feet high; one of the best large sized, rapid-growing trees; should be given plenty of room to develop. Leaves are large sized, and flowers very fragrant.
European Linden (T. Europaea)Not so large a tree as the American, but of more compact form. Leaves are smaller, but similar in shape.

## ULMUS Elm

American White Elm. (U. Ameri-cana)-Growth 50 to 60 feet in

## ELM, Continued

height. In the estimation of many people it has no superior for street planting or large lawns: wide spreading branches and rapid growth. Should have plenty of room to develop.
Camperdown Weeping Elm (Camperdown Pendula)-When grafted 6 to 8 feet high, forms a large handsome head; is of rank growth, and shoots often making a zig-zag growth downward and ontward, of several feet in a single season. The leaves are large, dark green, glossy and cover the tree with a mass of verlure.
Red or Slippery Elm (N. Fulva) - Not so large as the American, but foliage larger, and makes an excellent shade tree.

## EVERGREEN TREES

## ABIES Fir and Spruce

Balsam Fir (A. Balsamea) - A very erect, regular pyramidal tree, with dark green foliage; grows rapidly and is very hardy
Douglas Spruce (A. Douglasii)-From Colorado: large, conical form, branches spreading horizontally. Leaves light green above, glaticous below

$$
\begin{aligned}
& \text { JUNIPERUS } \\
& \text { Red Cedar, Juniper }
\end{aligned}
$$

Irish Juniper (J. Hiberinica) - A distinct and beautiful variety of an erect, dense, conical


Carolina Poplar. (See page 27. )
outline, resembling a pillar of green. Very desirable.
Swedish Juniper (J. Suecica) - A small sized, handsome, pyramidal tree, with yellowish green foliage; is quite hardy.
Savin Juniper (J. Sabina)-A dwarf spreading shrub, with trailing branches. Thrives in the poorest of soils. Very suitable for rock.
Red Cedar (J. Virginiana)-Well known American tree. Varies much $i_{11}$ habit and color and foliage,


Bechtel's Double Flowering Crab. (See page 27.) some being stiff. regular and conical, others loose and irregular. Makes a fine ornamental hedge plant.

## PICEA Spruce

Black Hills Spruce (P. Cana-densis)-An elegant tree, with drooping branches and fine Yew-like foliage; perfectly Colorado Blue Spruce (P. Pumgens) -Of pyramidal form and compact growth.
Koster's Blue Spruce (P. Kosteriana) - The richest colored of the colored evergreens; hardy and vigorous grower; elegant habit. A beatiful tree for any lawn, with its silver blue sheen.
Norway Spruce (P. Excelsa)Rapid in growtl: graceful, drooping branches: long and dense in structure: regular in nutline and perfectly hardy.
White Spruce (P. Alba) -Of compact pyramidal form; more symmetrical than the Norway Spruce, but of less rigorotis growth; elegant silvery foliage.


American White Elm. (See page 28.)

## SPRUCE, Continued

hardy and quite distinct. Makes a fine ornamental hedge.

## PINUS Pine

Austrian Pine (P. Laricio var. Austriaca) - Grows to a remarkable height; very robust, with long stiff leaves and deep green foliage; hardy everywhere and valuable for planting as wind breaks, screens, etc.; growth rapid.
Scotch Pine (P. Sylvestris)—A native of the British Isles; fine, robust and rapid-growing tree, with stout red shoots and silvery green foliage; very hardy and valuable for shelter.
White Pine ( $P$. Strobus)-Most ornamental of all our native pines; foliage light, delicate and silvery green; flourishes in almost the poorest of light sandy soils.

## THUYA Arbor Vi'ae

American Arbor Vitae (T. Occidentalis)-A beautiful native tree, commonly known as the White Cedar. Especially valuable for screens and hedges.
Pyramidal Arbor Vitae (T. Orientalis var. Pyramidalis)Of upright pyramidal, compact-habit; very desirable.
Siberian Arbor Vitae (T. Orientalis var. Siberica)-One of the best; exceedingly hardy, keeping its color well in winter; growth compact and pyramidal; of great value for ornaments, screens and hedges.

## ORNAMENTAL SHRUBS <br> UPRIGHT DECIDUOUS SHRUBS <br> AZALEA

A. Mollis-Showy, hardy plants, used extensively in parks and public lawns; one of the most valuable flowering shrubs; flowers large and showy, yellow and different shades of red.

## BERBERIS Barberry

Thunberg's Barberry (B. Thunbergii) -From Japan; a pretty species of dwarf habit, small foliage, changing to a beautiful coppery red in autumn. Valuable as an ornamental hedge.
European Barberry (B. Vulgaris) - A handsome, deciduous shrub, with yellow flowers and terminal, drooping racemes; bloom in May or Jume, following with orange scarlet fruit.
Purple Barberry (B. Vulgaris var. Purpurea) - A beautiful shrub grow-


Red Cedar. (See page 29.)

## BARBERRY, Continued

ing three to five feet high, with violet purple foliage and fruit; very effective in groups and masses or planted by itself.

## CALYCANTHUS SWEET-SCENTED SHRUB

C. Floridus-A native species, six to eight feet high, with double purple, fragrant flowers; wood is also fragrant; foliage rich; blooms in May, and at intervals afterwards.

## CARAGANA Pea Shrub

Siberian Pea Shrub (C. Arborescens)-A shrub or low tree; native of Siberia and China; bears pea-shaped yellow flowers in May.

## CORNUS Dogwood

Siberian Dogwood (C. Alba var. Siberica) A distinct variety and beautiful. of the dogwood species, having silver margined leaves.

Green Branched Dogwood (C. Sanguinea) Very conspicuons and ornamental in winter, when the bark is a bright full red.

## CYDONIA Quince

Japan Quince (C. Japonica) - Has bright scarlet and crimson flowers in great profusion in the early spring; foliage is bright


American Arbor Vitae. (See page 30.)


Koster's Blue Spruce. (See page 29.)
green and glossy, and retains its color the entire summer, which renders the plant very ornamental; is sufficiently thorny to form a defense, and at the same time makes one of the most beathtiful flowering hedges.

## DEUTZIA

Double Flowering Deutzia (D. Crenata var. Flore Pleno)-Flowers double, white tinged with rose; one of the most desirable flowering shrubs in cultivation; flowers are produced the latter part of Junc.
D. var. Pride of Rochester-Produces large, double white flowers, the back of the petals being slightly tinted with rose; excels in size of flower, length of panicle and profuseness of bloom; vigorous and hardy.

Slender Branched Deutzia (D. Gracilis) - A charming species of dwarf habit; flowers pure white; fine for pot culture, as it flowers freely at low temperature in winter; one of the first flowering in June.
D. Hybrida Lemoinei-A hybrid from France; flowers pure white, growing on stout branches, which are of upright habit; growth dwarf, and free flowering. A most beautiful species of its class.


Thunbergis Barberry. (See page 30.)

## DIERVILLA-Wiegelia

White-Flowered Weigelia (D. Candida)—Of vigorous habit and erect growth, becoming in time a large-sized shrub; flowers pure white and produced in great profusion; plant continues to bloom throughout the summer; very effective for borders, contrasting finely with the greens of other shrubs.
D. Hortensis a Carriere-Flowers of bright rose color; one of the best sorts.
and the leaves remain fresh until late in the autumn, giving it additional value for gardening decorations.

## EUONYMUS-Burning Bush

Burning Bush (E. Atropurpureus)-An ornamental evergreen shrub or small tree; leaves long and narrow, of a purplish color. Flowers are purple and borne in clusters; blooms in June, followed by small scarlet berries.

Eva Rathke (D. Hybrida) - Six to eight feet high; a new Weigelia, flowers of a beautiful crimson; blooms all summer.
Rose-Colored Weigelia (D. Rosea)-The best one of the Weigelia; an elegant variety, with fine rose colored flowers in June.
Variegated Leaved Weigelia (D. Nana Variegata) - One to two feet high, of dwarf habit: leaves are fincly margined with creamy white; blossoms resemble Rosea; not perfectly hardy.

## ELEAGNUS Oleaster

Russian Olive (E. Angustifolia) -A very large shrub or small tree: leaves are narrow and silvery white in color; blossoms are small, yellow and very fragrant; very hardy.
Japan Oleaster or Silver Thorn (E. Longipes) - In July the plant is covered with bright red berries of large size, and edible: flavor is pungent and agreeable; very ornamental,


Azalea. (See page: 30.)

## FORSYTHIA Golden Bell

Fortune's Forsythia (F. Fortumeii) - A pretty shrub of medimm size, native of Japan and China: flowers are drooping, yellow and appear very carly in the spring, before the leaves: foliage deep green.
F. Suspensà- 1 very carly and showy spring hloomer: flowers bright yellow: branches long and slonder. Golden Bell (E. Viridisima) - Fine hardy shrub: leaves a fine deep green, flowers deep yellow; blooms bers early

## HIBISCUS SYRIA-

CUS Althea or Rose of Sharon
H. S. var. Ardens-Flowers double, very large, color violet, petals cquilled. Plant is very vigorous and a splendid, showy shrub.
H. S. var. Duchess de Bra-bant-Flowers large, refl-
dish lilac. A very beatutiful shrub for lawn.
H. S. var. Jeann d'Arc - ()nce of the best new shrubs; pure white, double; plants strong growers


Deutzia. (Sce page 31)

H. S. var. Lady Stanley-Flowers double; olor blush white.
H. S. var. Meteor-Deep crimson, very bright.
H. S. var. Totus Albus-Single, pure white and exceedingly fine.

## HIPPOPHAE

Sea Buckthorn (H. Rhammoides)- I graceful and willow-like shrub, with woft gray foliage and shender drooping branches; erpecially charming near the water.

## HYDRANGEA

Hardy Hydrangea (H. Paniculata Grandiflora) - ()ne of the best shrub in cultivation. Is a strong grower and produces large panicles of white flower- in . Ingust, which change to a delicate pink and then green, lating tuntil winter: to prodtue best results should be grown in rich -ril, with fenty of manure. It in a very how and cifective shrul).
Tree Form (H. Paniculata Gatadiana)Same an the abowe except that it in arown in -tandard or free form.

## JUNEBERRí

Improved Dwarf-() ne of the mont lomatiful flowering hrub); every stem and branch of the bush is a solid mase of delicate ieathery whiteness ; \&rowら ? 20 to ! ! inches high.

## LIGUSTRLM Privet

Amoor River (I. Amurennct Plant very hardy and tall, growing with upright branches: foliage glowy green: holds its

## LIGUSTRUM

## Continued

color almost the entire year. One of the best hedge plants known.
Chinese (L. Ibota) - A valuable nerw shrub: flowers large, white, very fragrant and produced in great profusion: leaves long, showy; one of the hardiest of the privets and distinct.

California Privet (L. Ovalifolium) -A vigorons and hardy variety, with fine habit and foliage. Valuable for hedges.

Regel's Privet (L. Regeliantmo - A fine, hardy variety, desirable in growing singly as a specimen or in mass planting. This is one of the berry varieties.
L. Vulgaris - Has narrow foliage, with showy whitc, flowers.


Weigelia. (See page 32.)


Hydrangea. (See page 33.)

## LONICERA Bush Honeysuckle

Fragrant Upright Honeysuckle (L. Fragrantissima) - A spreading shrub with deep green foliage and very fragrant small flowers, which appear before the leaves; almost evergreen. One of the most desirable sorts.
Tartarian Honeysuckle (L. Tartarica) Pink flowers, which contrast beautifully with the foliage.
White Tartarian Honeysuckle (L. T. var, Alba)-Forms a high bush, with creamy white flowers; blossoms in May and June.

## PHILADELPHUS Syringa Mock Orange

Garland Syringa (Ph. Coronarius) - A well-known shrub, with pure white, fragrant flowers. One of the first to flower.
Golden Leaved Syringa ( Ph . Folius Aureis) - A rery pretty plant of me-

## - SYRINGA, Continued

dium size of golden yellow foliage: keeps its color the entire season and will be found valuable for creating pleasing and striking contrasts with purple-leaved shrubs
Large Flowered Syringa (Ph. Grandi-florus)-Has very showy, large flowers, slightly fragrant; branches are somewhat straggling.

## PRUNUS Almond, Plum

Double Dwarf White Flowering Almond (P. Japonica Flore Alba Pleno)-Produces beattiful double white flowers in May:
Double Flowering Plum (P. Triloba)Large shrub or small trec: flowers double, of a delicate pink, thickly set on the small, slender branches; a very de. sirable varicty.
Dwarf, Double Red Flowered Almond (P. Japonica Flore Rubra Pleno) - A beautiful small shrub, bearing an abundance of small double rose-like flowers in May, closely set upon the twigs, before the leaves appear.
Purple-Leaved Plum (P. Pissardi)-One of the best and finest purple-leaved small trees or shrubs; foliage and young shoots are of a rich reddish purple, which they retain throughout the season; flowers small white, single, covering the tree.


European Mountain Ash. (See page 28.)

## RHAMNUS Buckthorn

Common Buckthurn (R. Catharticus) - A fine, robust, hardy shrub of European origin; dark green foliage, white flowers and small black fruit. A very popular hedge plant.

## RHODODENDRON

Rosebay-One of the most beautiful flowering shrubs known. During the blooming season, May and June, the plants are literally covered with the most delicately colored flowers. They are most effective when planted in groups or beds. By grouping several colors of the different varieties, an effect can be produced that is not obtainable with any other shrub. They will grow in any good soil, but a sheltered situation will give the best results. In hot, dry weather soak the ground about once a week. A protection of leaves and brush during the winter will be beneficial.

## RHUS Sumach

Purple Fringe or Smoke Tree (R. Cotinus) - A much-admired shrub, for its curious fringe or hairlike flowers. which eorer the whole surface of the plant in mil-ummer. (irow= ton to twelve feet high, and spreads so as to require con-iderable space.

## RIBES Currant

Crimson Flowering Currant (R. Sanguin-eum)-A native species of deep red flowers, produced in great abundance early in spring.
R. A. var. Crandall-One of the best of the yellow flowering sorts; bush a strong grower, fruit very good, and the size of small cherries. A shrub that is very attractive to the birds.
Yellow Flowering Currant (R. Aureum) -A native species, with glabrous, shining leaves and yellow flowers.

## SAMBUCUS Elder

Golden Elder (S. Nigra var. Aurea) - A handsome variety with golden yellow foliage; a valuable plant in livening shrubberies.
Variegated Elder (S. N. var. Variegata) -Of strong, healthy growth; foliage mottled, with yellow and white. One of the best variegated leaved shrubs.

## SPIREA

S. Arguta - Of dwarf habit, slender, graceful; foliage fine light green; flowers clear white; the best flowering white Spirea.
S. Bumalda-A very handsome species from Japan; habit dwarf; vigorous; foliage narrow; flowers rose-colored, appearing in great profusion during mid-summer and autumn.
S. B. var. Anthony Waterer-An improved variety, with dark crimson flowers;



Smoke Tree. (See page 35.)
one of the finest shrubs of recent years.
S. Ballardi-Flowers are rose-colored; bush of medium size and an upright grower.
S. Callosa Alba (Fortune's Dwarf White)-The white flowering varicty of bushy, symmetrical form. Kiceps in flower all summer.
S. C. var. Rosea-Plant is low and many branched; flowers a bright pink, borne in large clusters
S. Douglasi-Has spikes of beautiful deep rose-colored flowers in July and August.
S. Opulifolia - A strong growing shrub, with white flowers.
S. O. var. Aurea-Foliage golden yellow, tinted, double white flowers in Junc; very conspicuous.
S. Prunifolia Flore Pleno-Beantiful shrub from Japan, with pure white flowers, like white daisies; keeps in flower a long time, and is considered in the front rank among flowcring shrubs.
S. Thunbergii (Thunberg's Spirca) Of dwarf habit and rounded, graceful form; branches slender and somewhat drooping; foliage narrow, and yellowish green; flowers small, white; one of the first to bloom.

## SPIREA, Continued

Nuch liked on acconnt of its neat, graceful habit.
S. Van Houttei-Without (question the finest varicty in the collection; in May and carly June, the plant is covered with a mass of latge white flowers, presenting a beatuful appearance: very hardy

## SYMPHORICARPUS Wax Berry

Snowberry (S. Racemosut) - A well-known shrub, with small pink flowers and large white bertics, that hang on the plant throughout part of the winter.
S. V. var. Frau Dammann-A fine single white lilac, panicles very large. Flowers are medium size and pure white.
S. V. var. Ludwig Spaeth-Panicles long; individual flowers large, single, dark purple red; finest of its color.
S. V. var. Emile Lemoine-Flowers very large, of fine globulat form; color rosy lilac and very double
S. V. var. Michael Buchner-Plant dwarf; panicles very erect and large: individual flowerss medium, very double; color pale lilac.
S. V. var. President Grevy-Very large branched trusses: flowers large, rosy lilac, changing to lilac: double.

## SYRINGA Lilac

Persian Lilac (S. Per-sica)-(of more slender growth and finer foliage than the common lilac; grows 4 to 6 feet high: small foliage and bright purple flowers
Common Lilac (S. Vul-garis)-Bluish purple flowers. One of the standard varieties
Common White Lilac (S. V. Alba)-Flowers are borne in slender panicles, pure white and very fragrant.
S. V. var. Charles XA strong, rapid-growing varicty with large shining leaves: flowers are borne in trusses of a reddish putple color.
S. V. var. De Croncels-Carmine red in bud, lilac when open; trusses are large and distinct from other varieties.


Syringa, Mock Orange. (See page 34.)

TAMARIX
T. Africa-A very beautiful shrub, with small leaves, somewhat like the Juniper; delicate and small flowers in spikes of upright habit and flowers in Jay.

## VIBURNUM Arrow Wood

High - Bush Cranberry (V. ()pulus) - Both ornamental and useful; its red berries resemble cramberries, are estecmed by many and hang on the bush until destroyed by frosts late in the fall.
Common Snowball (V. O. Ster-ilis)-A well-known favorite slirub of large size, with glob-ular-shaped heads of flowers: flowers the latter part of May Japan Snowball (V. Plicatum)

From North China, of moderate growth, with globular heads of pure white flowers carly in June; surpasses the common variety in several re--pects; foliage much handsomer, flowers whiter and more delicate.

# CLimbing Shrubs or Vines 

## AKEBIA

Akebia Quinata-A Japanese vine that is worthy of a place in all gardens. It grows very rapidly, making it suitable for covering fences, walls, porches, etc. The cinnamoncolored flowers are very fragrant and present a pleasing appearance when in full bloom.

## AMPELOPSIS

A. Q. var. Engelmanii-Shorter jointed than the Quinquefolia. A good climber, grows 6 to 10 feet in a season.

Boston or Japan Ivy (A. Veitchii)-Leaves smaller than those of the American variety, and overlap one another, forming a dense sheet of green. Plant is somewhat tender while young, and requires protection during the first winter; grows rapidly and clings very tenaciously; foliage changes to scarlet crimson in autumn. One of the best for covering brick walls, rockeries, etc.

Virginia Creeper (A. Quinquefolia) - Has beautiful leaves, which become rich crimson in autumn, and is a very rapid grower; throws out tendrils and roots at the joints by which it fastens itself to anything that it touches; one of the finest vines for covering walls, verandas or trunks of trees.

## ARISTOLOCHIA

Dutchman's Pipe (A. Sipho)-Native species of climbing habit. A rapid grower, with magnificent light green foliage; bears curious pipe-shaped yellowish brown flowers.


Snowball. (See page 37.)

## CELASTRUS

Bittersweet (C. Scandens)-A native climbing or twining plant, with fine large leaves, yellow flowers and clusters of orange capsuled fruit; grows ten to twelve feet in a season.


Spirea-Dwarf White. (See page 36.)

## CLEMATIS

## LARGE FLOWERING

 SORTSC. Duchess of Edinburgh-One of the best double, pure white; blossoms are most deliciously scented.
C. Henryii-Very large and of fine form; a free grower and blooms profusely; flowers are creamy white and very large.
C. Jackmanni - Large, intense violet purple flowers, remarkable for their velvety richness; free in growth and an abundant and successful bloomer.
C. Madam Edouard AndreFlowers large and of a beattiful bright velvety red; very free flowering and continuous bloomer.

## CLEMATIS, Continued

C. Ramona- $A$ strong, vigorous grower and very hardy; a perpetual blooming variety flower is deep sky blue and very attractive and of extra size.

SMALL FLOWERING SORTS
American White Clematis (C. Virgin-iana)-A rapid climber, growing to the height of 20 feet; produces an immense profusion of flowers in August.
C. Coccinea-Flowers are small and bell shaped; one of the prettiest sorts.
C. Paniculata-One of the most desirable and beatutiful hardy garden vines, being a luxuriant grower and profuse bloomer, and possessing fine foliage: particularly useful for covering verandas, pillars, fences, etc.: flowers are medium size, star shaped and exceedingly fragrant: when in bloom gives the appearance of a snow bank.
C. Viticella-A very beautiful vine, producing small blue flowers; is a strong and rapid grower.

## LONICERA Honeysuckle

Chinese Twining Honeysuckle (L. Japonica) - A well-known vine; holds its foliage


Wistaria.


Lilac. (See page 37.)
nearly all winter; blooms in July and September, and is very sweet.
Hall's Japan Honeysuckle (L. Halleana) - A strong, vigorous and most fragrant sort; pure white flowers, changing to yellow; very fragrant; blossoms from July to December; the best bloomer of all.
Monthly Fragrant or Dutch Honeysuckle (L. Belgica)-Blooms all summer; flowers red and yellow; very sweet.
Scarlet Trumpet Honeysuckle (L. Sempervir-ens)-This is one of the handsomest in cultivation; a strong and rapid grower and produces beatiful scarlet flowers of not much odor.
Yellow Trumpet Honeysuckle (L. Flava) - A well-known native vine, with yellow trumpet flowers.

## LYCIUM Matrimony Vine

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

## PERIPLOCA Silk Vine

P. Graeca-A native of Sonthern Europe. A rapid-growing, beautiful climber; will twine around a tree or other support to a height of 30 to 40 feet; foliage glossy and purple and bears large clusters of flowers.

## TECOMA Trumpet Flower

Trumpet Creeper ( $T$. Radicans) - A splendid. hardy, climbing plant, with large trumpetshaped scarlet flowers in August.


Boston or Japan Ivy. (See page 38.)

## WISTARIA

Chinese Purple Wistaria (W. Sinensis) -One of the most elegant and rapid-growing of all climbing plants; attains immense size; has long, pendulous clusters of pale blue flowers in May and June; also blooms late in antumn.
Chinese White Wistaria (W. S. var. Alba) Flowers are pure white and is regarded as one of the best varieties.

## HEDGES FOR ORNAMENT

American Arbor Vitae (T. Occidentalis)—A beautiful native tree, especially valuable for screens and hedges.
Barberry-One of the most interesting family of shrubs, varying in size from two to six feet high; flowers are showy and of different colors. Very ornamental in the autumn and winter. See cut on page 32.
Japan Quince-Has bright scarlet crimson flowers in great profusion in the early spring; foliage is bright green, glossy and retains its color the entire summer. It is especially recommended for ornamental hedges.

Norway Spruce (A. Excelsa) - Extremely hardy and of pyramidal form; one of the popular sorts for planting as single specimen or in masses for effect and shelter; one of the best of the evergreen hedge plants.
Spirea Van Houttii-Makes a nice hedge to divide lawns from garden; foliage is beautiful at all seasons; perfectly hardy; branches droop gracefully and are covered with bloom the latter part of May.
Spireas-See description on page 36.

## FOR SCREENS

American Arbor Vitae-See description on page 30.
Carolina Poplar-See description on page 27.
Norway Spruce-See description on page 29.
Tartarian Honeysuckle-See description on page 34 .

## SHELTER BELTS

Austrian Pine-See description on page 30.
Norway Spruce-See description on page 29.
Scotch Pine-See description on page 30.

## HARDY ROSES

## HINTS ON ROSE CULTURE

SOIL-Roses delight in a clay loam, enriched with well-rotted barn-yard manure. Dig up the soil thoroughly to a depth of 12 to 15 inches, pulverize well; do not raise the beds above the level of the surrounding soil. Soak the bed occasionally during the summer with weak manure water.

LOCATION-Roses delight in an open, airy situation unshaded by trees and buildings. Always plant in solid beds and each class by itself.

WHEN TO PLANT-We adrocate planting in the fall, in friable soil, firmly packed with the foot, but do not bruise the roots; give goorl soaking of water after planting. Is soon as severe freezing weather sets in, raise the earth around the plant 3 to + inches, with leaves, straw or evergreen boughs, weighting the former with pieces of wood or limbs. Dormant plants set in the spring should be planted early, before growth is started. No plants suffer more by being planted late than does the rose

PRUNING-This should be done during March; for hybrid perpetuals remove about onethird to one-half of the previous year's growth. Strong growing varieties reguire less pruming back than weak growing ones. In the ever-blooming class, two-thirds of the previous year's growth should be removed. Cut out all old or decaved wood anmally, also all feeble branches and such as are crowding each other. Some of the hybrid perpetual varicties can be made to bloom again in the fall if pruncd soon atter spring blossoming time is over.

INSECTS AND DISEASES-It is very important to keep your plants healthy and vigorous and free from diseases and insects. If troubled with green fly, spray vigoronsly, covering thoroughly every part of the foliage with sulpho-tobace soap or kerosene emulsion, made by mixing two parts of kerosene with one part of sour milk. Dilute with twenty parts of soft. water. Bordeaux mixture is one of the best preventiven from mildew and black spots, which are fungous diseases usually catused by continuous wet weather. By careful attention the discases and insects may be keqt down and plants will reward you with their beatiful blooms and foliage.

## HYBRID PERPETUAL SORTS

Alf. Colomb - Brilliant carmine crimson: very large. full and of fine form: extremely fragrant: foliage large and handsome
American Beauty-One of the finest roses known, a very general favorite on account of its long stems, making it especially desirable for cutting: blooms are large and very double; deep rich crimson color, with exquisite shadings: belonging to the hybrid perpetuals, it is a constant bloomer. It requires some protection in winter.
Anne de Diesbach-A beantiful carmine shade; very large. one of the superior garden sorts. Fragrant and one of the hardiest.
Baron de Bonstetten-A rich, velvety maroon very large and full.
Baroness Rothschild-Light pink cupped in form. and very symmetrical; very hardy and a late bloomer.
Captain Hayward - Flowers are very large, color bright carmine crimson, vigorous and very full.
Clio-Flowers large and of globular form: flesh colored, shaded in the center with rosy pink, and very vigorous and has handsome foliage; one of the best roses.
Coquette Des Aples-One of the finest pure white hybrids; large, fine formed; color pure white, sometimes tinged faintly with pale blush; a profuse bloomer.
Coquette Des Blanches-One of the finest white roses; purc white, with beautiful shell-shaped


Hall's Japan Honeysuckle. (See page 39) very suitable for cemetery planting.
Dinsmore-A very free bloomer: flowers are scarlet to crimson, large, double and very fragrant.

Earl of Dufferin-Rich, brilliant velvet crimson shaded with dark maroon; full and fincly formed and very fragrant; a vigorous grower and one of the finest dark roses.
Eugene Furst-Velvety crimson, shaded with

HYBRID PERPETUAL ROSES, Continued deep crimson; large, full and of a good shape; very fragrant.
Fisher Holmes-Deep glowing crimson; large, moderately full and of fine form.
Frau Karl Druschki-Flowers are large; of perfect form and snow white in color; very free bloomer. Bush a vigorous grower.
General Jacqueminot-Brilliant crimson, not full, but large and extremely effective; fragrant and of excellent hardy habit.
General Washington-Bright red, with crimson shading; large flat form, often indented; very full and free bloomer.
John Hopper-Bright rose, with carmine center; large and full and profuse bloomer, and one of the standard roses.
Jubilee-Flowers very large; color intense crimson maroon red; fragrance strong and lasting; plant very vigorous.
thorns; flowers are fragrant, of soft rich red shading to pale pink.
Lady Gay-Possesses the strong upright growth of the Crimson Rambler, and has the same dark, rich foliage; bud begins to open a deep pink, shading to almost pure white as the flowers mature; flowers borne in large clusters, and are very double and a little larger than Dorothy Perkins. Very hardy.
Prairie Queen-Color bright pink, sometimes striped; large, double and full; blooms are carried in clusters.
Russell's Cottage-Color ranges from pink to deep crimson; blossoms in clusters, large, double and full.
Seven Sisters-A popular old variety, blooms in clusters and color varies from dark to light red or pink.
Tennessee Belle-A strong, vigorous climber that blooms freely; flowers bright rosy blush, full and fragrant; one of the hardiest sorts.

Magna Charta-Bright clear pink; large fine form; double and a free bloomer; very fragrant.
Madam Gabriel Luizet-Pink; very large and cup-shaped; somewhat fragrant. Is a good exhibition rose.
Margaret Dickson-White, with pale flesh center; petals very large and shell-shaped; of a splendid form and very fragrant.
Marshall P. Wilder - Flowers large, full and well formed; color cherry carmine; very fragrant; plant of vigorous growth and very hardy.
Mrs. J. H. Laing-Color soft pink; large, and of fine form; produced on strong stems; an exceedingly fragrant and continuous bloomer.
Paul Neyron-Deep rose; one of the most desirable garden roses known; a yery free bloomer and of rapid growth.
Prince Camille De Rohan-Deep velvety crimson; large, moderately full; a free bloomer.
Soleil D'Or-New yellow rose; flower is full, large and of globular shape; yellow, shaded with red; a vigorous grower and a free bloomer.
Ulrich Brunner-Brilliant cherry red; fine form and carried very erect on the plant; petals are very heavy.
Vick's Caprice-Large, pink striped and blushed with red and carmine; vigorous and free bloomer.

## HARDY CLIMBING ROSES

Baltimore Belle-A rapid-growing, dark-leaved rose; blooms in large clusters of pale blush white flowers late in the season.
Empress of China-A hardy, rapid-growing rose, of graceful climbing habit and few


Clematis Paniculata. (See page 39.)

## THE RAMBLER ROSES

Baby Rambler-An ever-blooming dwarf crimson rambler; blooms constantly from June until frost; is especially fine for grouping and can be potted and grown indoors, making a beautiful compact mass of color.


Marshall P. Wilder. (See page 42.)

## RAMBLER ROSES, Continued

Crimson Rambler-The best one and most popular climbing rose in existence; of rapid growth, is perfectly hardy; flowers are carried in clusters and a most profuse bloomer.
Dorothy Perkins-Bright crimson flowers, are borne in clusters; a beautiful shell pink color, and very fragrant; its habit of growth is very similar to the Crimson Rambler.
Philadelphia-Flowers are borne in large clusters, completely covering the whole bush; color deep, pure rich crimson, much better and more intense than the Crimson Rambler. Strong, quick grower, perfectly hardy and rarely requires winter protection.
Pink Rambler-Flowers are perfectly double, with petals crinkled and flowers a clear shell pink, borne in immense clusters: is a valuable rose for cutting and decorating.
White Rambler-Related to the Crimson Rambler: similar in habit of growth; flowers are pure white, quite double and remain on the stem a long time.
Yellow Rambler-Flowers are perfectly double, and very fragrant; color light yellow, changing to straw.

## JAPANESE TRAILING ROSES

## WICHURIANA HYBRID.

Manda's Triumph-Flowers are me-dium-sized, perfectly double, pure white and very fragrant; plant an erect grower; dark green foliage and is very hardy.
Pink Roamer-Flowers are single, and from two to three inches in diametef; rich pink, with silvery


Frau Karl Druschki. (See page 42.)


Pink Rambler. (Sec page 43. )

## MISCELLANEOUS ROSES

Harrison's Yellow-Bright golden yellow, very hardy; grows three or four feet high and is a very prolific bloomer early in the spring.

A desirable sort for grouping with other roses.
Madam Plantier-One of the hardiest of all roses; a strong, vigorous grower and an enormous bloomer; flowers are a lovely snow white.


Rosa Rugosa.

Persian Yellow - Flowers are a deep yellow, rather small but are borne in great profusion. Consid ered to be one of the finest of the yellow roses.
Rosa Rugosa-A Japanese variety that forms a strong, sturdy bush four to five feet high; foliage is dark glossy green and is remarkably free from insects; flowers are single, borne in clusters, and are followed by a profusion of large bright red berries.
R. Alba-Pure white, fine petaled and highly scented.
R. Rubra - A beautiful, bright rosy crimson, excecdingly ornamental.
R. Agnes Emily-CarmanFlowers semi-double and borne in clusters, bright crimson: a free and continuous bloomer.
R. Mad. Geo. BruantFlowers in clusters, semi-double buds, long and pointed, pure white.

## HARDY PERENNIAL PLANTS

## ACHILLEA Yarrow

The Pearl ( 1. Ptarmica) -Small double white flowers; blooms in July; one of the prettiest flowering plants and invaluable for borders.
ANEMONE Windflower
A. Japonica var. Alba-A distinct and beatiful variety: flowers two and a half inches in diameter; pure white in center, golden yellow; bloom in great profusion from September to November: is effective as a pot plant
A. J. var. Oueen Charlotte-Flowers are semi-doublc, broad and perfectly formed; of a pleasing nink shade. similar in color to the La France rose.
A. J. var. Rubra- 1 very showy flower; rose colored with a yellow center.

## AQUILEGIA Columbine

A. Carulea-lowers large sepals, white petals and long recurved spurs.
A. Chrysantha-Bright golden yellow, with long spurs.

## ASTER

Michaelmas Daisies
A. Laevis-Splendid light blue variety, blooms very early.
A. Grandiflora-Flowers large, violet blue; blooms late.


Crested Moss Rose. (See page 43.)


Lady Gay. (See page 42.)
A. Snowflake-A distinct, pure white flower; very beatiful.

## DELPHINUM Larkspur.

D. Belladonna-A remarkably showy class of tall-growing plants; procluces magnificent spikes of blue flowers in summer.
D. Sulphureum-Same as above, only flowers are a bright yellow.

## CHRYSANTHEMUM

C. Leucanthemum Hybridum - Originated by Luther Brubank: flowers very large, white with golden center; plant blooms profusely.
C. L. var. Alaska-Flowers borne on long, clean stems, purc white; very large and graceful; plant is an abundant bloomer and will merit a place in any garden.
C. L. var. Westralia-This is distinguished by its branching habit; flowers are a beautiful cream color, semi-double, and are produced in profusion.

## DIELYTRA—DICENTRA Bleeding Heart

D. Spectabilis-A handsome, curiously formed rosy pink flower, with white and blue tinged protruding stamen; is quite hardy; one of the best border plants.
FUNKIA Day Lily
F. Lancifolia var. VariegataVery slender lance-like leaves, margined with white, and pale lilac flowers.
F. Subcordata-A handsome, showy plant, with beautifu! large, broad leáves; flowers pure waxy white, borne in large trusses.

## GAILARDIA <br> Blanket Flower

Gailardias are among the showiest of the hardy perennial plants; beginning to flower in June, they continue a mass of bloom for the entire season. They are perfectly hardy and require little or no attention; flowers are large, dark red in center, and petals are a variety of brilliant

color, bright crimson, orange and vermillion; are produced on long stems, making them excellent for cut flowers.

## GYPSOPHILA Baby's Breath

Baby's Breath (G. Paniculata)-A fine plant, forming a compact bush about four feet high; flowers small, white and large loose panicles.

## HIBISCUS Mallow

H. Militaris--Tall growing; flower delicate flesh pink, darker toward the center.
H. Moscheutos-A fine old swamp rose mallow; large purplish pink flowers, large dark eyed.
H. M. var. Crimson Eye-Immense flowers of pure white, with large centers of velvet crimson.

## HYACINTHUS

H. Candicans-A bulbous plant for summer and fall; blossoms are white pendant and bell shaped, produced on full stalks three to four feet high; stalk has 20 to 30 flowers.

## HOLLYHOCKS

One of our grandest summer and au-tumn-flowering plants; makes a splendid background for a flower garden. Flowers are both single and double, of many shades of color, from deep yellow, red and purple to pure white. An old-fashioned plant, coming into general use again.


Rudbeckia-Golden Glow.

## IRIS Fleur de Lis

German (I. Germanica) -Plants well established, produce from 50 to 100 spikes of bloom: very fragrant and fine for cutting; colors range from richest ycllows, delicate blues, claret red, white and primrose; should be planted in moist places, such as banks of pondis cte.
Japan Iris (I, Kaempferi)-Finest of the Iris family: flowers are of immense size, six to eight inches in diameter: the most beautiful and delicate shades; are very hardy, and flower in great profusion during June and July.
I. Caerulea-Flowers bright lilac, with yellow shading on outer edge; blooms early.
I. Violacea-Plant is erect. leaves large; flowers violet, with dark veins; blooms early and is very showy:

## RUDBECKIA Cone Flower ;

Golden Glow (R. Laciniata Flore Pleno) A large, showy plant, attaining a height of six to eight feet; flowers very large, double and well formed; color a deep golden yellow, and borne on long stems, which render them suitable for cutting: bloom profusely from July to September.

## SALVIA Sage

S. Azurea Grandiflora-A Rocky Mountain species, very pretty in August and September; bears a profusion of sky-blue flowers.

## YUCCA Adam's Needle

Y. Filamentosa-Has a fine appearance: stems two feet abowe the gromind. cowered with large bell-shaped flowers, forming a perfect pyramid: color creamy white.

## HERBACEOUS PAEONIES

These attain the largest and most showy and attractive fiowers in cultivation, almost rivaling the rose in color and bloom. The
bush is of stately growth, very hardy and at the present time very fashomable. Colors range from pure white through the different shades of pink, rose, varicgated, purple, etc. They increase in beanty with age, and may be planted in almost any situation. Recommend fall planting. They succeed best in rich soil and will be benefited by a mulch of manure during the winter, which mat be lightly spaded into the soil in the spring.
Baroness Rothschild-Violet rose, with lighter shadings.
Charles Binder-Fine, even, bright deep pink.
Doyenne d' Engheim-Violet rose and carmine.
Duchess de Orleans-Rose colored outside, deepening with age, center changing from buff to silvery rose.


Phlox. (See page 48)


Paecnies. (See page 47.)

Daniel d'Albert-Deep rose, shading to purple; large, globular flower.
Festiva Maxima-Flowers borne on long, stiff stems; pure white, inner petals slightly tipped with carmine.
Francoise Ortegat-Purplish crimson, with yellow stamens; tall growing.
Golden Harvest-Blush pink petals, blush white collar, with golden blush center, the whole effect being a creamy pink, large, fragrant and a vigorous grower.

Cross of Honor-Striped lilac and white.
Hector-Bright pink; one of the best.
Madagascar-Delicate rose, with deeper eye and white halo.
Mme. P. Langier-Bright red, with vermillion center.
Prime Minister-Rosy white, with deep rose center.
Queen-Large, pure white.
Richard Wallace-White, with rosy center.

Giganthea-Clear light pink, silvery tip, rose shaped and qutite open: large bloom on long stem; early and very fragrant.
Henri Demay-Brilliant crimson, of fine form; bloom late, plant vigorous.
Insignis- Large bloom, anemone shape, petals bright pink, center soft pink and chamois.
Jussieu-Pink, with chamois center.
La Martine-Bright velvety red, large flower, delicate pink, bordered with white.

## PHLOX

No chass of hardy plants is more desirable than Phlox. They will thrive in Onj pusition and can be used to advantage in borders, large groups and planted in front of shrubbery. Nearly all the varieties are adapted to cutting. Culture is easy. The blooming season is curing July and August and may be prolonged by pinching back some of the plants in Junc. Will succeed in good garden soil.
Athis-Tall: dark stems, light salmon, with violet eye.
Bridesmaid-White with heavy carmine eye.
Coquelicot-Pure scarlet, crimson center; one of the very best.


Japan Iris. (See page 47.)

## BULBS AND TUBERS FOR SPRING PLANTING GLADIOLUS

The Gladiolus is one of the most attractive of all the summer flowering bulbs and deserves a place in every garden. It re-

## GLADIOLUS, Continued

quires little carce and is sure to flower abundantly. Set the bulbs from six to nine inches apart and about four inches deep; plant from late March to first of June.

## CALADIUM Elephant'sEar

 Caladium (Elephant's Ear)- A splen did ornamental foliage plant for lawn or garden; grows three to fom feet high; leaves are immense size, frecfuently three feet long by two feet wide: prefers a rich soil and plenty of water: plant after all danger of frost is over, about three feet apart: lift before freczing weather, cut off tops and store in dry cellar during the winter.
## CANNAS

Indian Shot Plant-A -tately and very ornamental plant with brilliant flowors and foliage: grows three to fonm feet high: flowers are borne on long spikes in all of the varions shades of scarlet, crimsom, yellow, cream, cte: leases are bright green or brownith red. Plant in May or Junc in good, rich garden soil, about 15 inches atoart: after plants have attained a good growth, water frecly: When killed down by frost. cut off the lops, lift the roots, leaving the earth on and store in cool, dry place. When replanting in the spring, divide carcfully, leaving two or three cyes to each root.


Hyacinths. (Sce page 50.)


## DAHLIAS

The Dahlia is coming to the front in the ranks of summer flowering plants. There is nothing that can equal them in range of color and abundance of bloom. They are splendid for cut-flower work and command attention wherever grown. Plant in good, rich garden soil; set three feet apart and for


Dahlia.
best results allow but one stalk in a hill; before freczing weather, dig and store in frostproof cellar.

## TUBEROSE

The Tuberose is one of the most highly perfumed and swectest flowers known. Grows about cightecn inches high, sending up long, slender spikes, completely covered with beatiful white waxen flowers. Plant in May, after ground is warm, three inches deep and six inches apart. Before ground freezes in the fall, lift the bulbs and store in warm, dry cellar. They can also be grown in pots in the house.

## HARDY BULBS FOR FALL PLANTING

 CROCUSThese dainty little flowers are among the first to appear in the spring, a sure harbinger of warmer weather. They have a wonderful range of colors, which are brilliant and showy; an excellent bedding plant; when arranged in rows or beds by planting the varions varieties, they make a splendid spot of color in the garden. Should be planted in the fall, about two inches deep.

## HYACINTHS

The most beatiful and fragrant of early spring flowering bulbs. The waxlike, bell-shaped flowers are borne in large trusses and the variety of colors is endless. They are very easy of cultivation, and can be grown either in pots of soil or glasses of water for winter $\quad$ loom. ing. When grown in the garden they form gorgeous spots of color before other spring flowers come into bloom. Plant in the fall in good rich garden soil about four inches deep and three to four inches apart.

## LILIES

Among the most beautiful of all the garden plants; they are rich and varied in color, stately and handsome in habit, and have a delicious fragrance. They thrive best in a dry, rich, well-drained soil, where water will not stand in winter. After planting they require little care and can be left undisturbed in the ground for several years.
L. Album Speciosum - Very fragrant large flowers, pure white, with a green band running through center of each petal; one of the best.
L. Auratum (Gold-Banded Lily) - Flowers very large of a delicate ivory white, thickly dotted with rich chocolate-crimson spots; a bright golden band runs through the center of each petal.
L. Candidum-The ever popular snow-white, hardy garden lily: grows three to four feet high and blooms in June. Requires scarcely any care; splendid for massing in beds.

## LILIES-Continued

L. Harrisii (Bermuda Easter Lily)-Flowers latge, trumpet shaped, pure waxy white; gracefully formed and very fragrant. This is the lily of which thousands are grown every year for Easter decorations.
L. Longiflorum-A well known, beatiful snow white, fragrant, hardy garden lily: flowers large, trumpet shaped; blooms in June and July.
L. Tigrinum (Double Tiger Lily)-Flowers bright orange-scarlet, with dark spots. A strong, showy variety and entirely hardy. Succeeds well everywhere.

## NARCISSUS OR DAFFODILS

Among spring flowering bulbous plants these flowers are descrvedly the most popular. The flowers of the different types present an endless variety of color and many of them are delightfully fragrant. The early sorts commence blooming in March and with a selection of mid-season and late flowering sorts a succession of bloom may be enjoyed well into May: As cut flowers they are very beattiful and lasting. Nearly all the varietics are hardy and increase from year to year.


Tulip.


Lily, Harrisii.

## TULIPS

We know of nothing for the money invester that will give greater returns in gorgentes show in early spring than the tulip. They thrive well in almost any soil and the large range of colors gives an opportunity for massing in beds and rows that produce an effect that is indescribable. The various varieties are single and double, the double sorts lasting much longer in bloom than the single. Should be planted in October or November, for early spring blooming, is good garden soil, about six inches deep and five to six inches apart. If left in the gronnd they will grow from year to year and increase.

\section*{FORMULAS <br> 

Repeat one weel later in the same way. If necessary under the bands, and a fourth four weeks later. After the eggs under the scales hatch (May 15 to June
15 ) spraying with kerosene emulsion, 1 part to 10 parts water, or whale-oil soap, 1 lb . to 5 gals. water arsenate of lead may be used in the summer when Or arsenate of lead just as the buds open in the spring. Kerosene emulsion is effective when insects appear. Repeat before the leaves curl if necessary. Cutting
off twigs covered with eggs in winter usually suffices
for young trees. for young trees.
For the root form, when present, remove the soll and treat with finely ground tobacco placed around base
Make dust of 1 part paris green, 25 parts bran or flour. Make dust of 1 part
Repeat if necessary.
This will kill the winter eggs. If the mite appears in
samphur to the kerosene for each gallon of spray.
Dig out worms in fall and spring with a knife. During
the growing season whitewash base of trunk. Dif out worms in fall and spring with a knife. During
the growing season whitewash base of trunk. Add more soap than the formula calls for Repeat
10 to 12 days later if necessary
Again while the last blossoms are falling. Use a verAgarel nozzle. Do not drench the trees.
gain just after blossoms fall. Spray a third time, just
 arate. Prune trees so as to admit much sunlight.
 In the spring before the buds burst.
When the leaves are off the trees. .. Sujuds uy liəus spnq əuł se fsnc Just as the buds are swelling.....

When the leaves are off the trees.
When the insects appear and befor
 Just as soon as the insects appear
When the insects appear ......... When the leaves are off the tree. When the leaves are off the tree.. When the leaves are off the tree..


What to Spray With

Sulphur-lime wash

Sulphur-lime wash Sulphur-lime wash Sulphur-lime wash Nearly all deciduous trees Appie, mainly

Peach. Sometimes Plum,
Apple and Chery .... Apple and cherry .... All orchard trees Apple, Prum, Prune Cherry and Peach ... oil soap ......................
Kerosene emulsion,
to 12 parts water...... Whale oll and quassia.
Paris green dust ...... Krosene emulsion Arsenate of lead....
Sulphur-llme wash . Sulphur-Lime Wash ...
 Kerosene Emulsion. ....... Pear, Currant, Poplar, etc. Apple, mainly Peach. Prune Pear Leaf. Peach, Prune ..............



5 Bud Moth ..
6 Green Aphis
7 Black Aphis
8 Wonlly Aphis.
9 Aphis ..........
10 Cabbage Worm
11 Cabbage Aphis
12 Slug ...............
14 Blister Mite
15 Peach Tree Borer
16 Flathead Borer.
17 Cottony Scale.
Immediately after the leaves fall
Just before the blossoms open
Sulphur-Lime Wash....... Just before the buds open Before buds burst.

Repeat at intervals of 10 days till fruit is pleked.
Soak seed for two hours, then cut and plant. Do not plant in soll where scabby potatoes were grown.
Again two weeks later. If blight is bad on unsprayed
potatoes near by, follow with a third application two

diseased ones.
Sprinkle the sed thoroughly; let it lie in a plle two
hours; dry and plant with a clean seeder.
This solution is used almost exclusively for the hop aphis. It is almost as effective without the quassia against other species of aphides Soap powders may be used in the same proportion without the quassia for most aphides.

## KEROSENE EMULSION

|  <br>  |  |
| :---: | :---: |
|  |  |


 from the fire. The mixture is then to be agi-
 on itself with a force pump. After four or five
 in consistence. If well made, the cream will stand for a long time without free oil rising to
 gallon of the emulsion to 12 gallons water in
 landry soap may be used instead of the whale oil soap.

LYE
$1 / 2$ pound
10 gallons

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