## Historic, Archive Document

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

## Illustrated and Deseriptive

$$
\begin{aligned}
& \text { CATALOGUE } \\
& \text { for } 1902 \text { and } 1903 \text {. }
\end{aligned}
$$



Nurspries locafed on Grravois Rood,
nine miles south of St. Louis Court House and three miles west of Carondelet in St. Louis Co., Mo.

## PLEASE READ CAREFULLY.

## TERMS, CONDITIONS AND GENERAL REMARKS.

TERMS: Invariably cash, except when otherwise agreed upon.
REMIT by P. O. money order, registered letter, draft or express money order. Please do not send private checks unless drawn on some St. Louis Bank. Address all letters to "H. J. Weber \& Sons Nursery Co.," Nursery P. O., Mo.-C. O. D. Orders must be accompanied with one-half the amount in cash.

FREE PACKING.-We will pack free all orders sold at catalogue prices, in the best possible manner, in bales or boxes, with moss.

FREE DELIVERY to Freight Depots, Express Offices or Wharfs in St. Louis.

SHIPPING.-Situated as we are, close to the great City of St. Louis, with her numerous Railroad and River facilities and all the different Express Companies, enables us to offer our patrons unsurpassed facilities for quick transportation North, South, East, and West.

EARLY ORDERS.-Customers should send in orders as early as possible; do not wait until the last minute and then expect to get stock in time. We are always rushed during the shipping season, and wishing to serve our patrons to the best of their interests, we kindly ask for early orders wherever possible.

DIRECTIONS.-Observe carefully that your name, P. O., County and State are plainly written on your order; also state whether to be sent by Freight or Express, and by what Route. It no directions are given, we will use our best judgement in the matter.

縣 ERRORS.-Any error that may occur in filling order, must be reported within 5 days after receipt of goods. We will immediately correct same. Complaints entered after the above stated time can not be entertained.

SUBSTITUTION.-It is customary, should the supply of a variety become exhausted (as will occasionally occur in all establishments), to substitute in its place a similar sort, if there is such, always labeling correctly. Should it be desirable for us not to do this, please state "No Substitution" on your order.

PERSONS UNACQUAINTED with the different varieties, can leave the selection to us, in which case we will select as if planting for ourselves.

EVERY CARE is taken to secure safe and prompt transportation. The forwarders alone must be held responsible for loss or delay in transit.


#### Abstract

ALL STCOCK will be sent out in good condition; we do not guarantee stock to live under all conditions, nor do we make up any loss whatever due to climate effects, or after culture on the part of the purchaser. $-0 n$ receipt of stock open package at once and ascertain condition of same, check up varieties and compare with your order and report to us at once. (If package has been frosted en-route or become dry, treat as per instructions given in our descriptive Catalogue page 4). We can not entertain complaints unless made promptly on receipt of stock.


INSPECTION.-Our nurseries have been duly inspected by the State Entomologist and have been found free of San Jose Scale and other dangerous insects and diseases. A copy of certificate of Inspection will be attached to every package that leaves our establishment.

FUMIGATJON. - Having built our own "Fumigatorium," we will fumigate with "Hydrocyanic Acid Gas" all stock sent to the States where same is required by law. Should any of our customers request us to "fumigate" their stock, we will be pleased to do so, free of extra charge.

## H. J. Weber \& Sons Nursery Co.,

Nursery Station, St. Louis, Mo.

## ILLUSTRATED AND DESCRIPTIVE

 Catalogue OF
# Fruit and Opnamental Trees, 

Evergreens, Shrubs, Vines, Small Fruit Plants, Etc.

# H.J.Weben \& Sons Nurseny (on., Nursery, Mo. 

NURSERIES ON GRAVOIS ROAD,
Nine miles from St. Louis Court House, in St. Louis County, Mo., one mile from City Limits and three miles west of Carondelet.

## . . . Introductory. . .

We again take pleasure in presenting our newly revised and enlarged illustrated and descriptive Catalogue of FRUIT AND ORNAMENTAL TREES, SHRUBS AND PLANTS.

We have not attempted a full and complete description of all varieties named, but shall be pleased to answer by letter any inquiries sent with stamp for reply, as to the m st desirable sorts for planting in different localities, and for different soils.

It is now conceded that our establishment is one of the largest and best stocked in the country, and being centrally located on high rolling land especially adapted to produce healthy growth, solid, firm wood and abundant roots so necessary to successful transplanting and being near the great city of St. Louis, with her numerous Railroad, Express and River facilities, gives us an adrantage envied by many and equaled by few.

We have commodious packing sheds and cellars for use during shipping seasons, in which all stock is packed in boxes and bales under our own supervision with the assistance of competent help in the very best possible manner; do not hesitate to send your orders for fear of distance.

One regular shipping season in Fall commences about October 155th and extends to November 15th or until freezing up, and in Spring from March 1st to May 1st, according to weather.

We are always pleased to show visitors through our Nurseries. To reach our grounds take "Cherokee" Street Car Line (going south) from St. Louis, to end of line, twenty minutes walk from there to Nursery.

We aim to keep abreast of the times in the introduction of new and valuable varieties of fruit and novelties and valuable acquisitions in ornamentals; accepting with pleasure everything that has real merit, we shall with equal readiness discard and discountenance the sale of worthless humbugs.

Extending our thanks for past favors, we respectfully solicit a continuance of your patronage, and to those with whom we have not had the pleasure of dealing, we ask for a trial order.

Very Respectfully,

## H. Y. Weber \& Sons Nursery Co.


#### Abstract

GUARANTEE. - We exercise the greatest care to have every tree and plant true to name, and are ready, on proper proof, to replace anything sent out by us, that may prove untrue to label, free of charge, or refund the money paid for same. It is understoed and agreed between purchasers and ourselves, that we are not to be held liable for any greater sum than that paid us for said trees and plants that prove untrue.

For Terms, Conditions and General Remarks see third page cover.


[^0]

REPRODUCED FROM PHOTOGRAPH. VREDENBEGG \& CO., ROCHESTER, N. Y.
For Small Grounds a Gem. Magnificent in Large Lawns and Parks.
Very Hardy, Vigorous, Long Lived, Easy to Transplant, Endures Heat, Cold and Drouth.

## Teas’ Weeping Mulberry.

Most Graceful of hardy weeping trees, and wholly unlike anything heretofore introduced; forming a perfect head, with long, slender, willowy branches, drooping to the ground. These hang like delicate vines from a hanging basket, and are swayed by the slightest breath of wind. All who see the tree agree that for light, airy gracefulness, and delicacy of form and motion, it is without a rival.
Foliage Beautiful-varied both in size and shape, handsomely cut, or divided into lobes, and of a delightful, fresh-looking, glossy green. In autumn many of the leaves are bordered with yellow, producing a very novel and pleasing effect.
Being a True Russian Mulberry, it possesses the wonderfully vigorous, healthy growth for which that species is so noted; is fre $e_{\text {from }}$ disease and insects, and it is one of the hardiest of trees, enduring, unharmed, not only the severe cold of the North, but the far more destructive HEAT and DROUTH of the South and Southwest.

It is a Long=Lived Tree, flourishing in any soil or situation, wet or dry, and will be found particularly valuable in the Western and Southwestern States.

Transplants Safely. It is one of the most successful trees to transplant. It nas a very strong hold on life, and will endure exposure and hard treatment that would kill almost anything but Catalpa or Osage Orange.
Rapid in Growth and abundant in foliage, forming a finely rounded, symmetrical head, making a most maghificent little tree. It is especially desirable for ornamenting small lawns where trees of large size could not be used, and no less appropriate in parks and other extensive grounds.

For Cemetery Planting it is admirable. Indeed, it stands without a rival. A PERFECT GEM in size, style and exquisite form, together with all the hardines, vigor and endurance that can be found in a tree. Cemetery trees are too often neglected, and usually fail; but here is one peerless in beauty and suitableness, that will be found equal to the situation.

Does Well in Cities, being less affected by smoke and dust than most trees. The leaves are so smooth and glossy that the dust and soot does not stick to them, as to rougher foliage.
Flourishes on the Bleak Prairies, West and Northwest, and in the hot and dry South and Southwest.
Every Tree maintains, perfectly, all the distinctive characteristics, and shows that with all its wonderful vigor, the Weeping Mulberry does not outgrow its beauty and grace. The longest shoots-many of them five to eight feet long-do not stand out, but fall in with the rest, and lose their individuality in the general mass of foliage.

It is Novel and Attractive, both in leaf and out, and will please every purchaser; and being so readily transplanted and easily managed, it will delight them by its further growth and development.

## DIRECTIONS FOR TRANSPLANTING TREES OR SHRUBS.

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

Preparation of the Trees.-This is one of the most important operations to be performed, and one in which the most fatal errors are liable to be committed. The obrect of pruning is two-fold. First, to secure a head properly shaped and sufficiently open to the sun and air for the successful ripening of the fruit; and second, to prepare the natural balance between the roots and branches of the tree, that a healthy growth may be secured.

When young trees are removed from the Nursery and often roots are broken or bruised, as will be the case however careful the digging, packing and transportation may be performed, it becomes very neccessary that the balance should be preserved by a proper and judicious pruning. This pruning should be adapted to the size and condition of the tree, and at the same time the form should not be forgotten. It should be so close as to enable the roots to supply the demand for sap from the remaining branches, and at the same time no growth already secured should be wasted.

In both standard and dwarf trees, it will be usually found a safe rule to cut back in pruning at transplanting one-half of the growth of the previous season. The ends of the larger roots should be made smooth with a sharp knife where they have been roughly cut by the spade in digging, always cutting from the bottom of the root with an outward cut, new roots will form
and the injured parts heal more readily with this attention.
Planting.-The holes should be dug large enough in the first place to receive the roots of the tree without cramping or bending them from their natural position. The tree having been properly pruned, should be held upright and the earth filled in about the roots, the finest and best soil from the surface being worked in among them, filling every space and bringing every root fully in contact with it. When hole has been half filled, pour in a pail or two of water, let this settle well, then finish the planting by placing soil enough about the tree to raise it somewhat higher than elswhere, and press the soil carefully down with the foot. Care must be taken against planting too deep; when the earth settles about the tree, it should stand at the same height as when in the Nursery. When set in Autumn, it is well to raise a mound of earth about the trees a foot or more in height. This will keep them from being swayed by the winds or thrown out by the frost during the winter. It should be removod in the spring. In planting dwarf trees, the stock on which they are budded, should be under ground.

Staking.-if trees are tall or in exposed situations, they should be supported by stakes to prevent injury from the action of the wind. Staking is done in the best manner by driving two strong stakes firmly in the ground, one on each side of the tree about a foot distant from it, and fastening the tree between them with bands of straw or other soft material, so that it may be kept in an upright position without chafing until the roots obtain a firm hold upon the soil.

Mulching.-This is properly done by placing a layer of coarse manure or litter from three to six inches deep about the tree, extending one or two feet further in each direction than the roots. This keeps the ground moist and of equal temperature, rendering watering unnecessary, and is in all respects preferable to it. Trees properly mulched are more certain to live and make much greater growth than those which are not so treated.

Cultivation after Planting.-Here is the grand opportunity for the success of the skillful fruit grower. It is not enough for him that his trees are of the choicest sorts, selected with regard to the climate and adaptation to the uses for which they are designed, that they are properly pruned and planted in dry, mellow soil, thoroughly enriched and prepared for their reception, protected from the winds by proper staking, and that they are perfect in shape and triftiness. He knows very well that all this may be properly and well done at great expense, and without further care be followed by an entire failure. So he watches their growth and defends them from their enemies, that the cankerworm and caterpillar do not find safe lodgment among their branches, nor the borer cut its way into their trunks, that the grasses do not form a close turf about them, or the cattle obtain access to them by neglected gates or fence corners, and break down the tender branches. He is well repaid, for they thrive and grow rapidly, the shoots are vigorous, the bark clean and smooth, and somn a most abundant crop of superior fruit testifies to his wisdom and care. His neighbor, perhaps with better soil, and equal care and experience in planting, having at the outset neglected these apparently trivial, but really important matters, sees instead of thrifty trees loaded with luscious fruit, the wreck of his hopes in a few mossy, scraggy, mis-shapen specimens of what he considers his ill-fortune, and hastens to remove. He, too, is justly rewarded for his neglect, as is his more prosperous neighbor for his care.

Those who are obliged to plant trees in a field of grain or grass, should see that all such are carefully mulched with rough manure, and that the ground is kept loose and moist about the trees. A hoed crop is greatly preferable in such plantation for the first five years. After a growth for this time, standard apple, pear, cherry and plum trees will grow and produce fairly in turf. The dwarf trees and peaches should be well mulched every year with loose manure, and the ground thoroughly cultivated. They will amply repay for this attention in the increased quantity and improved quality of the fruit.

Treatment of trees that have been frozen in the packages, or received
during frosty weather, or after long exposure.-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. If dried from long exposure, bury entirely in the ground, soaking well with water, or place in water from 12 to 24 hours, and should be pruned more closely than ordinarily.
Pruning.-Pruning after the first year should be varied according to the purpose of the planter and the variety of the tree. It should be trimmed as early as possible up to the height it is intended the future head should be, and the cutting off of large limbs may not in future be necessary. The removal of large branches should be avoided in all cases, whenever it is possible to do so, as decay is liable to commence at the point of seperation and extend into the trunk; and whenever it is done, the wound should be carefully pared smooth, and a coating of paint or grafting wax applied to protect it from the action of the weather. After the removal of lower branches until the head has reached the desired height, the only pruning needed is to remove such branches as are crossing or interfering with each other; and to keep the head in symmetrical shape and well open to the sun and air. Trees should receive proper shape by judicious pruning and attention early in the spring of each year while they are young, and very little pruning will be needed afterward. When trees are to be pruned and trained for specific purposes and in a special manner, the orchardist will find full directions in the standard works on horticulture, which may be read with great benefit and followed with success, but are beyond the scope of an ordinary Catalogue.

Grape Vines.-Require a dry, mellow, well-drained soil, deeply worked and well enriched, with a warm, sunny exposure. In planting give the roots plenty of room and settle the soil firmly about them. A strong vine may be allowed to grow the first season without pruning; in November or December following, the growth should be cut back to three or four buds; the next season allow but two buds to grow, which should make canes seven to ten feet long and be cut back
four to five feet the following winter, ready for fastening to the trellis. For the subsequent pruning of vines as well as trees, planters would do well to consult some practical work on the subject.

Berries-Should have a strong soil and be kept under constant cultivation. Mulching is of special value. Raspberries and blackberries should have old wood cut out each year, and new canes pinched off when three feet high. Strawberries should be mulched late in the fall; uncover the crown early in spring; remove mulch after fruiting and spade in light dressing of manure.

Currants and Goosberries-Need heavy mulching and pruning, so that new wood will have room to grow.

Roses-Shoald have a deep, rich, welldrained soil, and should be severely pruned every spring before the buds start, cutting back all the last growth to three or four buds, except Climbing Roses, which may be first allowed to partly cover the space desired. Old decayed branches should never remain. Every autumn compost should be placed around the stems of the plants, and spaded into the ground in the following Spring.

## WINTERING NURSERY STOCK PROCURED IN THE FALL.

In sections where the winters are very severe, it is not advisable to set out young trees and plants in the fall, but the practice of procuring them in the fall, covering them with earth during the winter and planting them in the Spring is becoming more and more popular, as experience has demonstrated its advantages. In the Fall Nurserymen are not hurried in their own planting; the season for shipping them is comparatively long, and the weather not nearly so changeable as in the Spring. Railways are not so much hurried, and there is much less chance for injurious delays than in the Spring. It being practicable to plant trees so procured as soon as the frost is out, they become thoroughly established the first season.

Some have an impression that trees dug in the Fall and trenched in over Winter are worthless. This is a great mistake. Peach
and some other young trees, if left standing during their first Winter, are frequently killed or injured by frost. While if dug in the fall and treatet as below described, they come through bright and uninjured.

To insure succes, select a spot where no water will stand during the Winter, having no grass near to invite mice. Dig a trench deep enough to admit one layer of roots, and sloping enough to permit the trees to lie at an angle of not more than $30^{\circ}$ with the ground. Having placed one layer of the roots in this trench, cover them with mellow aerth, extending well up on the bodies, and see that this is firmly packed. Then add another layer of trees overlapping the first, and continuing as at first until all are heeled in. As soon as this is done, cover the tops so well with evergreen boughs or corn stalks, that they will be thoroughly protected from winds.


## Rpples.

The first fruit both in importance and general culture is the apple. Its period, unlike that of other fruits, extends nearly or quite through the year. By planting judicious selections of Summer, Autumn and Winter sorts, a constant succession can be easily obtained of this indispensible fruit for family use.

There is no farm crop which, on the average, will produce one-fourth as much income per acre as will a good apple orchard.
Plant 30 feet apart each way, 48 trees per acre.

## Summer Varieties.

Carolina Red June-Medium size, red; flesh white, tender, juicy, sub-acid; an abundant bearer. July.

Yellow Transparent (Russian)-Skin clear white, changing to pale yellow when fully ripe; flesh white, tender, sprightly subacid; good, early bearer. July.

Early Harvest-Medium to large, flat, pale, yellow, good; tree a fair grower and bearer. July.


Yellow Transparent.

## Red Astrachan

 (Russian) - Large, roundish, nearly covered with deep crimson, overspread with a beautiful bloom. Rich and juicy. July and August.
## Duchess of Olden-

 burg (Russian)-Medium to large, striped mostly red, best summer cooking apple; tree hardy, early and a good bearer. July and August.Sweet June-Medium size, round, yellowish flesh, very sweet and tender eating! apple, fair for cooking. Tree upright. July.

Chenango Strawberry - Rather large, oblong, conic, slightly ribbed, striped and splashed with bright crimson on whitish yellow ground, flesh white, very tender, with a pleasant, mild, sub-acid flavor. September.

## Autumn Varieties.

Wealthy - Fruit medium, oblate, skin smooth, whitish vellow, shaded with deep red in the sun, splashed and spotted in the shade. Flesh white, fine, tender, juicy, lively, sub-acid; very good. September and October.


Duchess of Oldenburg.
Maiden Blush-Large, flat, pale yellow, beautiful blush, mild, sub-acid, valuable for market, cooking and drying. September.
Red Beitigheimer (German) - Large to very large, bright red all over, rich crisp, sub-acid, ripening in early fall. Shy bearer here.
Jefferies-Medium in size; yellow and red; tree a free grower, productive. A juicy, sub-acid apple. One party of Illinois says, Jeffries is one of the best apples I have. A fine bearer. I know of no apple that will bring more money. Of the finest texture and flavor. August.

Fall Pippin-Size large, roundish, generally a little flattened, pretty regular, fine yellow, with a tinge of brownish blush on one side. September and October.
Famuese (Snow Apple) - Medium to large, a handsome deep crimson, white fleshed apple of high flavor and of best quality, very productive. October.

Haas-Large to very large, oblate inclined to conical, some what ribbed, skin pale greenish yellow, shaded and striped with red, flesh fine white, sometimes stained, tender, sub-acid, good. Tree vigorous and upright, should be headed low and kept from becoming tall, when it will prove an early, abundant bearer, hardy. September and October.

## Rhode Island Greening -

Large, roundish, oblate, green, becoming greenish yellow when ripe, dull brown blush to the sun, flesh yellow, tender, juicy, rich, rather acid flavor. North and East it is their favorite apple. October.

Rambo - Size medium, oblate, skin smooth, yellowish white in the shade, streaked and marbled with pale yellow and red in the sun and spreckled with large, rough dots; very tender, rich, mild, subacid, very good. Tree vigorous, tender in some localities.

Talman Sweet-Medium or rather large, roundish oblate, slightly conical, color clear light yellow with a clear, brownish line from stem to annex; flesh white, firm, rich, very sweet and excellent variety to make apple butter of. Tree vigorous, hardy and productive. October.

McMahon White-Originated at Ithaca, Wis., about 25 years ago, tree vigorous, strong, spreading grower, bears very young and regular; fruit large to very large, creamy white, with reddish or pinkish cheek, very smooth and showy; stem long. Splendid cooking apple, but somewhat tart for dessert use, said to be very valuable north and west.

Longfield-This variety will be especially popular in Central Iowa on account of early and continued bearing of heavy crops of finely colored, even sized and good fruit. If picked early in Central Iowa it keeps as well as Grimes Golden or Jonathan.

Grimes Golden - Medium to large, roundish oblate, slightly conical, large specimens oblong, skin yellow with russet dots; flesh yellowish white with a mild sub-acid, agreeable, good to best flavor. Tree a good grower and early annual bearer. No orchardist should omit this variety. October.

Jonathan-Medium size, unless thinned on tree, when it becomes a fair size; form roundish conical; skin thin and smooth, the ground clear light yellow, nearly covered with lively red stripes and deepening into brilliant or dark red in the sun; flesh white, rarely a little pinkish, very tender and juicy, mild, sprightly vinous flavor, having such beautiful color it very often divides honors in the show room; as a dessert apple it is rarely equalled. Tree slender and spreading. October.
Twenty Ounce Pippin - Very large, nearly round; yellow, striped with red; quality good; vigorous and good bearer; popular as a market variety. November.

## Winter Varieties.

Wolfe River - Tree a strong, vigorous grower, hardy. Fruit large to very large, greenish yellow, shaded with light and dark crimson. Flesh white, rather coarse.
Cranberry Pippin - Fruit medium, roundishoblate, regular. Skin very smooth, light yellow, with bright scarlet cheek. Flesh white, moderately juicy, brisk, sub-acid. Good. November to January.
Northern Spy - Fruit large, roundish oblate, conical, greenish yellow, covered
with light and dark stripes of purplish red, sub-acid, delicious flavor. Tree a strong, upright grower. September and October.

Greenville-A seedling of the old, well known fall Maiden Blush which it resembles in quality. Fruit large, light waxen yellow, with red cheek, flesh crisp, tender, juicy, mild sub-acid flavor. Season December to April.

Arkansas Black - Medium to large, dark red, fine grained, pleasant sub-acid, of best quality, a supposed seedling of Wine Sap which it resembles in fruit.

Akin-Fruit medium to large; resembles Jonathan, tree a more vigorous grower, will keep longer than Jonathan. Its fine appearance and superior quality, together with the great vigor of the tree, make it worthy of a trial. A fine winter apple.
Rome Beauty - Large, roundish flat, mostly bright red, mild sub-acid, very good; a good grower and early bearer. October and November.

Yellow Belleflower - Large to very large, oblong, pale, yellow, sometimes blushed, acid to sub-acid, rich and good. Tree a fine spreading grower and hardy. October to January.

Missouri Pippin-Large, oblong, bright red, with numerous grey dots, very handsome and of fair quality; an early and abundant bearer; profitable market fruit. October to April.

Wisconsin Russett-Originated in Wisconsin about 1852, introduced by A. D. Barnes of Waupaca, Wis., about 1885. Tree smooth upright grower, branches stout, resembling Pewaukee in appearance, somewhat tardy in bearing, fruit larger and more flat than Golden Russett, thick russetty skin; flavor equal to Golden Russett, longer keeper, said to be blight proof. A moderate annual bearer.


Gano.-1/4 size.
Gano-Tree very healthy, vigorous, hardy, having stood 32 degrees below zero without injury. A rapid grower, large and spreading
in orchard; fruit spurs numerous, shoots long, smooth, brown, with protuberances on the limbs, like the Ben. Davis; an early annual and prolific bearer. Foliage large, dark green; a good keeper. October to March.
Wagener-Good size, deep red in the sun; flesh firm, sub-acid, excellent.
Bismarck-Originated in New Zealand, showing wonderful productiveness and early fruiting. A stocky grower, making a smali, low tree, which sends out fruiting spurs and buts at a very early age. A large, handsome apple, of greenish yellow ground overspread and streaked with crimson and carmine; excellent for cooking. October to January.

Clayton-Fruit large, conical flattened, regular, greenish yellow, covered, striped and splashed with dull red; flesh yellow, breaking, sub-acid; good kitchen and market apple. November to March.

Gilpin or Little Red Romanite-Tree very vigorous and fruitful. Fruit medium size, roundish oblong. Skin very smooth and handsome, richly covered with deep red and yellow. Flesh yellow, firm, juicy and rich: good keeper. November to May.

Gideon-Tree as hardy as a crab, vigorous and an early and prolific bearer. Fruit medium to large; color a rich golden yellow with a clear and handsome blush on the


York Imperial-Medium, oblate; color white, shaded with crimson; flesh firm, crisp, juicy and sub-acid; a good bearer and keeper; one of the best winter apples. November to April.

Ben Davis - Large, roundish oblong, striped mostly red, very handsome, mild subacid, not rich. Tree very vigorous, hardy and productive. This is one of the safest and most profitable market apples grown in this country at present. October to March.

Jennett (Rawles) - Medium to large, where grown on good soil and not allowed to overbear; flat, conical, striped red, subacid, very good; market and family apple, also makes a splendid cider. October to April.

Minkler-Medium size, roundish, slightly conical, dull greyish red, quality good; a valuable family apple. Tree a moderate, regular bearer and a good keeper.
sunny side; flesh fine, juicy, sub-acid. November to January.

Walbridge-Medium size, oblate, regular, skin pale yellow, shaded with red; flesh crisp, tender, juicy; esteemed tor its hardiness and productiveness: a late keeper. Tree vigorous. January to March.

Wine Sap--Medium, conical, dark red, very smooth, acid to sub-acid, juicy and rich; very valuable for both family and market. Tree very hardy and an early and constant bearer. December to April.

Huntsman-Fruit large, flat, deep, yellow, very mild sub-acid, fine grained, very good, valuable for family and market. Tree fair grower and good bearer, but does not bear heavily while young. October to April.

Northwestern Greening-A Wisconsin seedling of great promise, having taken first prize at their State Society. Tree a good
grower and hardy; fruit yellow, smooth, rich, of good size, resembling Grimes Golden in shape and color; good quality and an extra long keeper. November to May.


Loy-Origin, Missouri. In size as large as the Ben Davis, resembles Willow Twig in form; color a beautiful red on yellow ground, deepening into a rich bronze, or russet, with marblings, minute dots; flesh fine, rich yellow, juicy. December to January.

Salome-Medium, roundish conical; pale yellow, slightly shaded with pale red, splashed and striped. Flesh tender, juicy, mild. Hardy, productive and a long keeper. October to May.

Ingram - Seedling of Rawles Jennett, originated with Martin Ingram of Greene Co., Mo. Fruit about medium size, dark and light red in stripes, with bloom; flesh yellowish white, firm, crisp, very mild subacid, aromatic flavor. Tree an upright, vigorous grower, an abundant bearer, keeps until apples come again.

Pewaukee-Medium to large, roundish, skin bright yellow, striped and mottled with light and dark red. Flesh white, juicy, subacid. Slightly aromatic. January to May.

Mammoth Black Twig-A seedling of Wine Sap, which it resembles in every way, except that the tree is a better and much more vigorous grower, more hardy, and the fruit is much larger; color even a darker red, flesh firmer, and most important of all, a better keeper; flavor milder. Probably one of the most valuable apples introduced.

## ©pab Apples.

Profitable for market, coming into bearing quite early. Some of the varieties are not only good for culinary purposes, but are especially desirable for table use.

Hyslop-Large size, beautiful dark crimson, hangs in clusters, good. September.

Transcendent-Large, roundish oblong, yellow and red striped. August to September.

Large Red Siberian-About an inch in diameter, grown in clusters, yellow, lively, scarlet cheek; bears young and abundantly. September.

Whitney No. 20-Also a beautiful kind, especially adapted for cider. One of the largest.

Martha-Raised from the seed of the Duchess of Oldenburg, a rapid, stiff grower, a perfect pyramid in tree; a great bearer of the most beautiful fruit, a bright, glossy yellow, shaded with light, bright red; a mild, clear tart, surpassing all other Crabs for culinary purposes, and fair to eat from hand. October to November.

Gen'l Grant-Tree a vigorous and upright grower, fruit large, red to very dark red; flesh white, tender mild, sub-acid, excellent for dessert and one of the best Crabs yet introduced. October.

## Deaches.

In order to preserve the continued healthy growth of the trees and the fine quality of the fruit, the trees should have the shoots and branches shortened every few years, so as to preserve a round, vigorous head with plenty of young wood; and the land should not be seeded to grass, but kept in constant cultivation.

The following have been selected after an examination of many different sorts in bearing, the best only being chosen. They furnish a succession for about three months, commencing the early part of July.

Plant 20 feet apart - Iog trees to the acre.

## FIRST RIPENING.

Sneed-The earliest peach known; originated in the South, where it has fruited tor several years, and, so far, has not failed to ripen 8 to io days before Alexander, and, on account of its earliness, has proven very profitable. Fruit medium size, creamy white, with light blush cheek: excellent quality, resembling its parent, Chinese Cling, productive.

Alexander-Above medium size, greenish white, nearly covered with deep red, very juicy and of good quality, adheres to the stone. Two weeks earlier than Hale's Early.

Greensboro - The largest and most beautifully colored of the extra early peaches, double the size of Amsden's June; ripens the same time; a freestone; flesh white, juicy and excellent.

Triumph-Earliest yellow flesh peach. Ripens with Alexander, blooms late, sure and abundant bearer; strong, vigorous grower. Fruit good size, yellow, with red and crimson cheek.


Triumph.

## SECOND RIPENING.

Early Rivers-Large, light straw color, with a delicate pink cheek, flesh juicy and melting, with a very rich flavor; peals readily at maturity. The most beautiful of early peaches.

Carman-Large, resembles Elberta in shape; color creamy white or pale yellow, with deep blush, skin very tough, flesh tender, fine flavor and quite juicy. Ripens with Early Rivers. One of the hardiest in bud; in shipping qualities and freedom from rot it is unsurpassed. Promises to stand at the head for a general long distance, profitable market variety, in quality ranking superior to anything ripening at the same time.


Carman.

## THIRD RIPENING.

Mt. Rose-Large, white, washed with carmine, flesh tinged pink, juicy, vinous, sub-acid and good flavor. Very good.
Family Favorite-Very large and a seedling of Chinese Cling, but a freestone, earlier, of finer color and quality; exceedingly vigorous and productive.
Mamie Ross (Cling)-Very large, oblong, color similar to Chinese Cling, of which it is no doubt a seedling, but has more of a red cheek. With us it is one of the best early clingstones, coming about with Early Crawford.

Yellow St. John-Nearly the size of Early Crawford and equal to it in beauty. More productive and of better quality. Orange yellow with a deep red cheek.

Champion-Originated at Nokomis, Ill. Flavor delicious sweet, rich juicy, surpassing all other early varieties. Skin creamy white, with red cheeks; strikingly handsome. It is early, productive, largest size. Perfect freestone.

Crawford Early-This very beautiful and best of yellow peaches is highly esteemed for market purposes. Fruit very large, oblong, skin yellow, with fine, red cheek, flesh yellow, juicy and excellent. Tree very vigorous and productive.
Elberta-Supposed to be a seedling of Chinese Cling, but is entirely free. Very large, yellow with red cheek; flesh yellow, firm, juicy, of high quality; exceedingly prolific, sure bearer and hardy. It is the best general peach for all sections. fine texture.

Chinese Cling-Fruit very large, oblong; skin clear straw color, almost transparent, with delicately mottled red cheek; flesh exceedingly juicy, sweet and refreshing. Well known and very popular.

## FOURTH RIPENING.

## Weber's Golden Free or Apri-

cot Peach-Size medium, color golden yellow with bright red cheek, where exposed to sun. Seed very small, flesh sweet, tree hardy and productive. This is the boss peach to eat and for culinary purposes.

Carpenter Cling-Very large, white, rich, juicy, very good. With us this peach is far superior to the old stand-by Washington Cling.
Newington Cling-Large, bright red, best qaulity for canning; flesh white.

Wheatland-Tree a stout and steady grower. The showy appearance of the large fruit makes it a valuable market sort. Color deep yellow with dark red cheek. Free-stone.

Old Mixon Free-Fruit large, skin pale yellowish white, marbled with red, the cheek a deep red; flesh white but quite red at the stone; tender, with an excellent, rich, sugary and vinous flavor.
Thurber-Large to very large, skin white, light crimson, mottling; flesh very juicy, vinous, of delicate aroma and of exceedingly

Emma-A new sort from the south, said to be of special value; ripens later than Elberta and comes to us highly recommended as worthy of trial.


Champion. $-\frac{1}{2}$ size.


Elberta.

Mathew's Beauty - A seedling from Randolph County, Ga., the original tree has been fruiting for 8 years and missed but one crop, is being largely planted as the most valuable succession to Elberta yet introduced. It is a size larger, ripens about 3 weeks later. Perfectfreestone, skin golden yellow, streaked with red ; flesh yellow, firm, of excellent quality. Probably the best market peach since Elberta was introduced. September.

Kalamazoo-A leading Michigan market sort. Large, yellow, fine quality. Extra productive and profitable. First September.

Old Mixon Cling-Fruit large, skin yellowish white with red cheek, flesh pale white, very melting, juicy and rich, high flavor.

Reeves F'avorite-Fruit large, roundish, inclining to oval, with a swollen point. Skin yellow, with a fine red cheek. Flesh deep yellow, red at the stone, juicy, melting, with a good vinous flavor. Free-stone.

Crawford Late-Ripens from 14 to 20 days later than the Crawford Early, and is larger in size, color about the same, only a little darker red and yellow. One of the best and finest yellow free-stone peaches, moderately productive. Ripens here in August.

Capt. Ede-Large to very large; suture extending a little beyond the apex; a rich orange yellow, flesh yellow, small stone; melting, rich, highly flavored, free-stone.

Grand Reporter-This variety was first brought to notice by Mr. Pfister, who found it in his orchard near Creve Coeur Lake, Mo., among other varieties. The large size and beautiful color attracted his attention. Tree very hardy und productive; fruit similer to Crawford Late, but about a week later.

## FIFTH RIPENING.

Stump the World-Very large, roundish, skin white, with bright red cheek; flesh white, juicy; one of the best late free-stones.

Gold Dust Cling - A large, fine peach in every respect, color bright yellow, shaded with red, juicy, sweet, valuable for canning.

Smock's Late Free - Large, bright yellow, dark red cheek. A most profitable late free-stone.

White Heath Cling-One of the finest canning peaches, good size, of lemon shape; tree a good grower and an excellent bearer.

Wonderful-A fine market variety, resembles Smock; ripening at same time.


Wheatland.-See description page 12.


Capt. Ede. - See description page 13 .


Picquet Late Free-Very large, yellow, with red cheek; flesh yellow, buttery, rich, sweet, and of the highest flavor. A• most valuable acquisition. The most profitable and desirable of all late yellow peaches.

Salway-Large, creamy yellow, crimson red cheek, flesh deep yellow, juicy, rich, sweet.

Krummel's Late (Star) -. Found in an orchard on the property of Mr. Krummel of St. Louis. Color a rich golden yellow, with bright, red cheek; round, free-stone, juicy. Ripens here about October 5 th, and is a good keeper.

## ©eaps.

The cultivation of this noble fruit is extending as its value is appreciated. The pear, like most things highly desirable and valuable, cannot be had without attention, labor and skill. One of the most important 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 a fortnight. Winter varieties, if they will hang so long, may be left until there is danger of frost. Gather when, on gently lifting the fruit, the stem will readily separate from the limb. Place in a dark room until fully matured. The pear succeeds on most soils, but probably does better on a rather heavy loam. Dwarfs must alzvays be planted deep enough to cover the junction of the pear and quince three or four inches, and about one-half of the previous summer's growth cut off each Spring. The side
branches should not be removed higher than one foot from the ground in Dwarfs, while Standards may be trimmed to the height desired.

The letters " $D$ " and " S " appended to the description of varieties, indicate favorable growth, either as Dwarfs or Standards, or both.

```
Plant Standards 20 feet apart eack way. 100 trees to the acre.
Plant Dwarfs io feet apart eack way. 430 trees to the acre.
```


## SUMMER.

Doyenne de Ette-(S-D)-An exquisite little pear, color bright yellow, shaded with red in the sun, ripens here about the ist to $4^{\text {th }}$ of July.

Wilder - (S) - Small to medium, bellshaped, yellow ground, shaded carmine;
flesh whitish yellow, fine grained, tender, sub-acid. Vigorous grower, early and annual bearer, very productive, good quality and one of the first to ripen.
Clapp's Favorite-(D-S) -Very large, resembling Bartlett in shape, ripening a few days earlier; a cross between that variety and Flemish Beauty. Tree vigorous.

Koonce-(S) - The handsomest, best and most valuable; very early pear; tree vigorous; upright grower; free from blight; magnificent foliage, which it retains late in the season; fruit medium to large; skin yellow, with handsome red cheek; flesh solid and does not rot at the core, juicy, spicy, sweet and delicious quality; an excellent shipper.


Vermont Beauty-(S) -Tree a strongvigorous grower, very productive. Fruit medium size, roundish; skin yellow, nearly cov, ered with carmine; flesh melting, sprightly best quality, fine flavor and juicy, by many pronounced equal to or better than the Seckel.

Tyson-(S)-Rather above medium in size, melting and juicy, sweet and fine flavored; one of the finest Summer varieties. Tree a vigorous and upright grower.

Bartlett-(S-D) -One of the most popular pears; large, buttery and melting; with a rich pear flavor. Tree a vigorous and erect grower, bears young and abundantly.


## AUTUMN.

Howell-(D-S)-One of the finest American pears. Large, handsome, sweet and melting; tree very vigorous, hardy and productive.
Louise Bonne de Jersey-(D)-A large, beautiful first-rate pear. Yellow, with a dark red cheek; melting, buttery and rich. Tree a vigorous grower and most abundant bearer.

Bartlett Seckel or Columbia-(S)Good size, hardy, vigorous and productive, of highest quality, rich and well flavored; high color, handsome. A cross between two of the oldest and best varieties, combining the best qualities of each.
Flemish Beauty-(S)-A large, beautiful, melting, sweet pear. Tree vigorous, fruitful, and succeeds well in most parts of the country.
Seckel-(S-D)-The standard of excellence in pears. Small, but of the highest flavor. Tree a stout, slow, erect grower, very hardy and bears abundantly.

Sheldon - (S) - Fruit medium, color greenish yellow, mostly covered with russet, a little brownish crimson in the sun; juicy, rich, aromatic, sweet.

Garber-(S)-One of the Japan Hybrids; the best and handsomest of its class. Earlier than Kieffer, larger and much better quality; free from blight, very hardy, immensely productive, bears young; excellent for canning or preserving, and sure to be planted largely for market as soon as its many excellent qualities become known.

Worden-Seckel - A seedling of the Seckel, which it much resembles in flavor; is equally as luscious, more juicy, with an aroma fully as rich and inviting, while in size, form, color and appearance it is far superior to its parent. Color, bright red on one side and light golden yellow on the other. Very hardy; bears young, and is an enormous producer; ripens just after Seckel; a splendid keeper. A magnificent pear.


Kieffer Hybri:-

Kieffer Hybrid-(S)-This is a seedling raised from the Chinese Sand Pear, crossed with the Bartlett. Skin rather rough, color yellow, with red cheek in the sun. Flesh white, juicy, buttery and rich. Tree a very strong and upright grower. Very profitable for the market.

Beurre de Anjou-(S-D)-A large, fine pear, buttery and melting, with sprightly vinous flavor. Tree a vigorous grower and good bearer; best on quince.

## Mikado or Japan Golden Russet-

 (S)-A rather curious but valuable pear from Japan, tree of luxuriant growth and an abundance of thick, leathery foliage, enabling itto withstand extreme heat and drouth. The fruit is flat or apple-shaped, very regular and uniform, of good size, and of a handsome golden-russet color when ripe. Best to fertilize Kieffer bloom.

Duchesse de Angouleme-(D)-The largest of all our good pears, succeeds on pear, but attains it highest perfection on the quince, and is a beautiful and vigorous tree. Most profitable for market.

Beurre de Clairgeau-(S)-Very large, yellow and red. Flesh yellowish, nearly melting, keeps sound a long time after gathering. Tree a free grower and an early and abundant bearer.


Lincoln Coreless.-1/4 size.

## WINTER.

Lincoln Coreless-(S)-Trees are good growers, with large, healthy foliage, hardy and free from disease. Fruit is all solid meat, usually no core or seeds; very large, sometimes weighing over a pound. When ripe, is highly colored and handsome, flesh rich yellow, juicy and aromatic. Claimed to be the largest, handsomest and latest of winter pears.

Lawrence-(S)-Size medium to large, obovate; color a golden yellow; flesh melting, with a rich aromatic flavor. Tree a moderate grower and abundant bearer.

## ©hepries.

The cherry is one of the finest and most delicate dessert fruits. The acid varieties are also highly esteemed for preserving and cooking purposes. Although a very perishable fruit, the period of its use may be prolonged to six weeks by a proper selection of varieties. The trees thrive well in any soil which is sufficiently well drained, but will not succeed a long time where the sub-soil is wet.
Our cherry trees are all budded on Mahaleb Stock, which makes a healthy tree, and does not sprout from the roots, which is a nuisance, when common Morello Stocks are used. -Those marked with a $\dagger$ are sweet sorts.
"Plant i8 feet apart each way-135 trees to the acre."
$\dagger$ Abbesse (Sweet Duke)-Large, dark red, delicious; almost equal to the Heart cherries. Very hardy, more so than other Dukes, a more vigorous grower and heavier cropper
Royal Duke-Said to be more valuable than May Duke, hardier and more fruitful, ripens evenly, gone before May Duke. Large, roundish oblate, pale amber, mottled bright red, tender, juicy, rich, nearly sweet.

Suda Hardy-A most valuable late cherry, an improved English Morello of which it is doubtless a seedling. In shape, color and quality it closely duplicates its supposed parent, while the tree is hardier, with better foliage, and a slightly better grower.


Ostheimer (Weichsel) - Large, heartshaped, almost black when ripe, full of purple juice, exceedingly rich, less acid than English Morello; good dessert and unsurpassed for kitchen uses. Very hardy both in tree and fruit bud, blooms late, and even young trees bend under their weight of fruit with unfailing regularity.

Early Richmond-Medium size, light red; melting juicy, sprightly, acid flavor. This is one of the most valuable and popular early varieties of the acid cherries. Tree healthy and productive.

May Duke-Medium, dark red; melting, rich, juicy; excellent; popular and reliable, early cherry, nearly sweet.
†Black Heart-Very large, black, juicy. rich, excellent and moderately productive,
$\dagger$ Black Tartarian - Very large, black, juicy, rich, excellent, productive.

Dyehouse-A very early and sure bearer. Ripens a week before Early Richmond.

Olivet-A new Duke variety of French origin. Fruit very large, globular and of a deep, shining red; tender, rich and vinous, with a very sweet, sub-acid flavor.

English Morello-Fair size, very dark red, rich, acid, juicy, good.
$\dagger$ Elton - Large, rather pointed, heartshaped, pale yellow with red cheek, sweet and very good.
$\dagger$ Reine Hortense - Very large, fine, heart-shaped, yellow, with red cheek, juicy and delicious. Tree a healthy and handsome grower; productive and very desirable variety.
†Yellow Spanish-Large, pale yellow; firm juicy and excellent; one of the best light colored cherries. Tree productive and a fine grower.

Montmorency Ordinaire-A large red cherry, ripening ten to fourteen days after Early Richmond; tree a slow but stiff grower, very prolific bearer, valuable. One of the most valuable late sour cherries.

Montmorency Large-Large, round or slightly heart-shaped; dark red, becoming nearly black when full ripe.

Late Duke-Fruit similar to May Duke, but later and not so sweet.

Wragg-Very hardy, vigorous and productive; medium, dark purple, fine quality.
$\dagger$ Gov. Wood-Large, roundish, heartshaped, light yellow, shaded bright red, sweet, very good. Tree vigorous and productive.

Rocky Mountain Cherry (Improved Dwarf)-From the mountains of Colorado. Hardy as a Wyoming sage-bush. With its deep green, willow-like leaves, mass of pure white flowers in spring, it is well worth cultivation for an ornamental shrub or small tree. Our trees are top-grafted and are 4 to 5 feet high.

## 〇〇lums.

The plum tree will accommodate itself to most situations not absolutely wet, but produces its finest fruits and most certain crops on heavy clayey soil.

The great enemy of this, as well as other smooth-skinned fruits, is the Curculio, and as a knowledge of a practical remedy for this pest is essential to the raising of good crops, a description of the only sure method for its destruction yet known is here given.

Shortly after the blossoms fall, and as soon as the presence of the insect is ascertained, by his crescent shaped mark upon the young fruit, procure a sheet large enough to spread over the whole surface of the ground covered by the branches of the tree; slit in the middle part way through, to allow it to pass on each side of the trunk of the tree: now jar the tree thoroughly, either by striking with a heavy mallet upon the stump of a limb, or by shaking suddenly all the larger branches. The insects, which closely resemble pea-bugs or dried buds, will fall upon the sheet and remain dormant for some minutes; gather them up with the thumb and finger and destroy them. This operation repeated every morning for two
or three weeks will save the crop. All stung fruit must also be carefully destroyed to prevent increase of the insects and thus render the work of the season comparatively easy. This remedy is sure and far more feasible than is sometimes supposed.
"Plant 18 feet apart-135 trees to the acre."

## Foreign Varieties.

German Prune-A large, long, oval variety, much esteemed for drying; color dark purple; a very agreeable flavor.

Shropshire Damson-An English variety of great merit for preserving. Tree very vigorous, hardy and an abundant bearer.

Damson (Common Blue)-A valuable market sort. It bears enormous crops. Thousands of bushels are annually sold in our markets. It is but little aftected by the Curculio, hence is growing steadily in favor with orchardists. Augusł to September.

Imperial Gage-Fruit large, oval, skin pale green; flesh juicy, sweet, rich and excellent. Tree very vigorous and productive. July.

Tatge - A seedling that originated at Belle Plain, Iowa, some 25 years ago. Its parentage is unknown; evidently belongs to the Lombard family. The heavy bearing of the Tatge is said to be unequalled by any other variety.


Lombard-Medium, round, oval, violet red; juicy, pleasant and good; adheres to the stone. Tree vigorous and productive. A valuable market variety; one of the most hardy and popular. July.
Mooer's Arctic-Size medium or below, skin purplish black, with a thin blue bloom; flesh greenish yellow, juicy, sweet and pleasant flavor. Tree healthy, vigorous; an early and abundant bearer.
Coe's Golden Drop-Large and handsome, light yellow, firm, rich and sweet; one of the best of late plums. Middle of August.

Smith's Orleans-Very large, reddish purple; juicy, rich and excellent; vigorous and productive. Middle of July.
Bradshaw-Large, dark red, flesh green, juicy, productive, fine for market. August.

Geuii-Large, blueish purple, flesh yellowish green, rather coarse; sweet, pleasant. One of the best market varieties. September.

## Native American Varieties.

This species of plum is attracting great attention throughout the West, and in fact, all over the United States.
Charles Downing (Chickasaw)-Large, roundish oblong; resembles a cranberry in color; skin thin, flesh firm, good quality; straggling grower; very productive; ripens with Wild Goose; an excellent shipper.
Milton-Rather large, roundish oblong, dark red, skin thin, flesh firm, good quality; said to be the earliest plum in the world. Ripens three weeks before Wild Goose. A strong grower and very productive.

Wild Goose-Well known, large, deep red when ripe, good quality, one of the best native plums; should be in every orchard. July.

Pottawattamie-Quality excellent ; an immense early annual bearer; medium size, red; tree perfectly hardy; a strong, vigorous grower; most profitable tree for the fruit grower.

Newman-Fruit medium, oblong. Color bright vermillion; adheres to the stone. Tree vigorous, foliage smaller than the Wild Goose. In fertility it is truly astonishing; its fruit ripens about August 15th and lasts until September ${ }^{5} 5$ th.

## Oriental Varieties.

Wickson-A sturdy, upright grower, productive almost to a fault. Fruit remarkably handsome, deep maroon red, covered with white bloom; stone small; flesh fine texture, firm sugary and delicious. Excellent keeper and fine shipper.


Willard-Ripens a month before Abundance, when ripe is dark red, bordering on purple; a long keeper, not inclined to decay, carries to market well. Tree vigorous grower; hardy and productive. July.

Red June (Red Nagate)-Medium size, pointed, color deep red purple, flesh yellow, quality good; cling. A good market variety.
Burbank-Large, nearly globular, clear cherry red with a thin lilac bloom, flesh a deep yellow, very sweet, with a peculiar and very agreeable flavor. Hardy, one of the best for both garden and market planting. August.

Botan (Abundance)-Beautiful, lemon yellow ground, nearly overspread with bright cherry and with a heavy bloom; large to very large, oblong, tapering to the point like Wild Goose; flesh orange yellow, melting, rich and highly perfumed. August.


Botan.

## Quinces.

The quince is hardy and prolific, bearing its crops with great regularity. The fruit always commands a good market, and with most families is considered indispensible for canning and for jelly.
The trees or bushes should have a good, rich soil, clean cultivation and an annual dressing of well rotted manure. Thinning out the twigs so as to keep the head open to the sun and air, and removing dead or decaying branches is all the pruning that is required.
"Plant Io feet apart each way-435 trees to the acre."
Bourgeat-The strongest and most distinct grower of all quinces, with large foliage and very handsome fruit. Keeps longer than most other sorts. Very prumising.

Meech - A vigorous grower and immensely productive. The fruit is large, lively orange yellow, of great beauty and delightful fragrance; its cooking qualities are unsurpassed.


Orange-Fruitlarge, bright yellow colorand good bearer. The standard variety in quinces.

Champion-Originated in Connecticut. The tree is a prolific and constant bearer; fruit averaging larger than the Orange, but not so high colored, more oval in shape. Quality equally fine, and a long keeper.

## Ppricots.

There is no fruit more delicious or beautiful than the Apricot and its ripening between cherries and peaches renders it especially valuable. Its chief enemy is the Curculio, which can be kept in check by the method suggested for plums.

> "Plant same as Plums."

Alexis (Russian) - Tree hardy, an abun, dant bearer; fruit yellow with red cheeklarge to very large, slightly acid, rich and luscious.

Catherine (Russian)-Tree hardy, vigorous and productive; fruit medium, yellow, mild, sub-acid, good. July.

Early Golden-Size small, color pale orange yellow, juicy and sweet, exquisite flavor.

Moorpark - One of the largest; color orange yellow with red cheek; firm, juicy, with a rich flavor; very productive.
J. I. Budd (Russian) A hardy, strong grower and profuse bearer, large, white with red cheek; sweet, juicy, extra fine, with a sweet kernel as fine flavored as the almond: the best late variety and a decided acquisition. August.

Alexander (Russian)-Tree hardy, an immense bearer; fruit large, yellow, flecked with red, very beautiful, sweet and delicious.


Downing's Ever-bearing-Very large, black, handsome, sweet, rich and excellent.

New American Equal to Downing's in all respects and a much hardier tree. Vigorous grower; very productive; the best variety for fruit; ripe from middle June to middle September.

## وPalberpies.



Downing's Everbearing.

## Puts.

Almond, Hard-Shell - A fine, hardy variety with large, plump kernel, and exceedingly ornamental when in bloom.


Japan or Giant Chestnut.
Japan or Giant Chestnut-A dwarf, grower, very distinct from other kinds, leaf being long and narrow, dark green, a fine ornamental tree in any situation. Commences bearing very young; two-year trees in nursery rows frequently producing nuts. Nuts are of immense size; their productiveness, early bearing and enormous size render them of great value.


American Sweet Chestnut.
American Sweet Chestrut-A valuable native tree, both useful and ornamental; timber is very durable and possesses a fine grain for oil finish. Nuts sweet, of delicate flavor, and are a valuable article of commerce. No farm should be without its grove of nut-bearing trees, and the chestnut should be foremost wherever the soil is adapted to its growth.

Paragon-A maonificent chestnut, formerly introduced under the name of Great American, but changed later to Paragon. The nuts are large, three or four in a burr, and in quality it is exceptionally sweet and rich. The tree is a most vigorous grower and an early and abundant bearer.


Corylus (Filbert or Hazel)-Our selection of this valuable nut comprises some $S$ or ro varieties, list of which will be sent on application.

Walnut (Japan Sieboldi) - From the mountains of Northern Japan. Leaves of immense size, a charming shade of green. Nuts are produced in abundance; grown in clusters of ten to fifteen, have a shell thicker than the English, but not as thick as the Black Walnut, much resembling Pecans. Meat is sweet, of best quality, flavor like butternut, but less oily. Tree vigorous, handsome form, bears young, and is very productive. One of the most valuable introductions of recent years. Perfectly hardy here, standing 26 degrees below zero without injuring a bud. Valuable as a nut and ornamental tree; should be planted in all sections. Trees on our grounds, 5 years planted, bore good crop of fine nuts in year 1901.



Walnut (Japan Sieboldi).

## Blackberries.

Many kinds of blackberries will succeed, not only on good fruit land, but even on the most sandy, porous soil. They require the same treatment as recommended for raspberries, but in field culture should be planted in rows seven feet apart and three feet distant in the rows; in garden culture plant rows five feet apart and three feet distant in the rows. The pruning should be governed by the growth of the cane and should be severe. Pinch back the canes in summer when three feet high, causing them to throw out laterals.
"When planting $7 \times 3$ feet apart, it takes 2078 plants for an acre."
"When planting $5 \times 3$ feet apart it takes 2904 plants for an acre."
Taylor-One of the blackest blackberries grown. Fruit of the best quality, melting and without core; very productive and as hardy as the Snyder, which renders it very valuable.


Eldorado - Very vigorous and hardy, enduring the winters of the far northwest without injury, and their yield is enormous. The berries are liarge, jet black, borne in clusters, and ripen well together; they are very sweet, melting and pleasing to the taste, have no hard core.
Snyder - Extremely hardy, enormously productive, medium size, no hard sour core. Easy to pick, fruit in clusters, mostly on top like raspberries.
Early Harvest - This is one of the earliest blackberries in cultivation; a compact dwari grower; fruit medium size and fine quality; an enormous bearer. It is so searly and it bears so well, eats so well, ships so well and


Early Harvest.
sells so well, that it is of notable value for a large portion of our country.

## Ancient Bri-

 ton-One of the best of the ancient varieties; very vigorous, healthy and hardy, producing large fruit stems, loaded with good sized berries of fine quality, that carry well to and bring highest price in market. For general planting for home or market in all sections subject to severe winters, the Ancient Briton is recommended as a first class variety.Rathburn-A strong erect grower with strong main stem branching freely; Hardy,

having endured 20 degrees below zero and produced a good crop. Forms a neat compact bush 4 to 5 feet high, producing its immense fruit abundantly. Fruit is sweet and luscious without hard core, of extra high flavor, standing at the head of all for quality; jet black, small seeds; firm enough to ship and handle well. Of enormous size, berries, having measured $\mathrm{I}^{3 / 4} \mathrm{in}$. long by I $3 / \mathrm{s}$ in. in diameter, and many of the ber-
ries will run $1^{1 / 4}$ to $I^{1} / 2$ in. long. 45 of them have filled a quart basket.

Minnewaski-One of the largest and most productive; has been on trial for several years and receiving most favorable reports from nearly all sections. Fruit glossy black, tender, juicy, sweet, with fine aromatic flavor. Remarkably productive and hardy. One of the best for both market and home garden. Ripens early.

## Paspberpies.



Will do well on any soil that will produce a good corn crop. Land should be thoroughly prepared and well enriched; ground bone is one of the best fertilizers. Keep well cultivated and free from weeds and suckers. As soon as they have done bearing, cut out the old wood to give vigor to the young canes. Spring is the best season to plant.
Plant in rows 5 feet apart, 3 feet apart in rows. 2904 plants to the acre.

## RED SORTS.

Cuthbert-A remarkably strong, hardy variety, berries very large; rich crimson, very handsome, sweet, rich and luscious, highly flavored.

Brandywine-A valuable market sort by reason of its firmness, gocdsize and brigh't crimson color. The canes are hardy, but lack vigor of growth, and are productive only on good, rich soil.

Columbian-An improvement on Shatfer's, wich it resembles, but the berry is firmer, adheres to the bush much longer and retains its shape better, both on the market and for canning. Bush a stronger grower, attaining a very large size. One of the hardiest, and wonderfully prolific. Unexcelled for productiveness and stands at the head for canning, making jam, etc.

Miller Red-Bright red color which it holds after picking. Stout, healthy, vigorous grower; canes not as tall as Cuthbert; well adapted to carrying their immense loads of

berries. Berries large, hold their size to the end of season, round, bright red, core small, do not crumble, firmest and best shipper; rich, fruity flavor.

Loudon - Canes strong and hardy and wonderfully productive. Berries large size, beautiful color and fine quality. Very desirable for home or market.

## BLACK SORTS.

Souhegan - Canes very vigorous, branching freely. Ripens one week earlier than Doolittle, is larger, jet black, productive. A wonderful market berry.

Palmer's-Ripens at the same time as Souhegan, but yields much more fruit at first picking, completes ripening its crop in a shorter time and commands the highest price in the market.

## Gregg or Hoosier Mam-

 moth-A large, black raspberry, of exellent quality, wonderfully productive and very hardy, best for evaporating.

Eureka.
Kansas - Strong, vigorous grower, standing extremes of drought and cold and bearing immense crops. Early, ripening just after Souhegan. Berries size of Gregg, of better color; jet black and almost free from bloom; firm, of best quality; presents a handsome appearance and brings highest price in market.
Eureka - Ripens nearly with Souhegan, fruit firm, of large size, equaling Gregg; superior quality, free from bloom, making it very attractive in fruit box; brings highest market price. Strong grower, very hardy, healthy foliage, and in some localities stands at the head for productiveness.
Ohio (Alden)-Hardy, vigorous and productive, berry of fine quality, good size, bright color and remarkably firm. For canning and evaporating one of the most profitable sorts.

## ©○○seberpies.

This fruit requires the same cultivation as the currant. The surest method to prevent mildew, is to plant thickly in the rows, and mulch deeply six or more inches with straw, tan bark, coal ashes, etc. Plantations thus treated have borne large crops for twenty years. The mulch retains moisture in the driest weather; the few weeds that push up are easily pulled, and the fruit is large and more evenly ripened. In mulching be sure that the ground is under-drained, or it is worse than useless. Good cultivating is better than half mulching. Put it on thick. In a dry season the extra amount of fruit will doubly pay for the material used, not to speak of the saving of labor and cleanliness of the fruit. The price is remunerative, and the demand is yearly increasing. The American varieties are not subject to mildew.

To prevent mildew, spray bushes as soon as leaves appear and several times during the summer with potassium sulphide (liver of sulphur), one ounce to four gallons of water.

Plant in rows 5 ft . apart, and the plants 3 ft . apart in the rows, 2904 plants to the acre.

Houghton Seedling-A vigorous grower, very productive; not subject to mildew. Flesh tender and very god.

Josselyn (Red Jacket) - Large, berry smooth; very prolific and hardy, quality and foliage is the best. We need a gooseberry which can be grown in our country, to take the place of Industry, which mildews so much that neither plants nor fruit can be grown, except in a very few localities.


Josselyn.


Pearl-Originated by Prof. W'm. Sanders of the Experimental Station at Ottawa, Canada. It has also been thoroughly tested at nearly all the Experimental Stations in the United States, and reports are unanimous in its favor. It is a wonderful cropper, strong grower and free from mildew. Fruit onethird larger than Downing.

Downing-Size medium to large, oval, greenish white, plants vigorous, upright very productive, excellent, never mildews.

Columbus-Fruit of largest size; oval, handsome greenish yellow; finest quality. Plant a strong, robust grower, so far free from mildew; foliage large and glossy. One of the best for general cultivation.

Keepsake - Fruit very large, strawcolored, of excellent flavor; carries well to market. Bloom is well protected by early foliage, making it one of the surest croppers.

## ©appants.

## CURRANTS.

Should be planted in good, very fertile soil, with liberal manuring, and the tops should be cut back nearly to the crown, allowing only three or four canes to grow the first year. Prune more or less every year to get rid of the old wood and keep the bushes open. Currant worms can be destroyed by white hellibore, one ounce to three gallons of water, and applied with a sprinkling can. Be sure to use the remedy as soon as, or before the worms appear.

Plant same as Gooseberries.
Pomona-A new red currant from Indiana; claimed to be more prolific, with fewer seeds and sweeter than the common sorts, Color a beautiful clear, bright red, about the size of Victoria; easily picked and hangs a long time after ripe.

Victoria-Large, bright red, with very long bunches; late, a good bearer.

White Dutch-An excellent and well known sort.

Red Dutch-An old variety, excellent and well known as the stand-by variety.

Fay's Prolific-The best currant yet introduced; berries large, uniform in size with long stems, good flavor, and is very productive and easy to pick.

President Wilder - Introducer says: Wilder will make twice as much wood as will Fay's Prolific, while setting as large fruit with double and triple the quantity, combines more good qualities than any Red Currant he has ever fruited. It is large,



President Wilder.
very productive, sweet and hangs a long time on the bushes in fine condition after fully ripe.

Cherry-Very popular in market, and brings several cents more per quart than any other old variety.

La Versailles-Very large, red; bunch long, of great beauty and excellent quality; one of the best and finest; should be in every collection.

## ©๐ropes.

There is scarcely a yard so small, either in country or city, that room for one to a dozen or more grape vines cannot be found. They do admirably trained up to the side of any building, or along the garden fences, occupying but little room and furnishing an abundance of the heathiest of fruit. Make the soil mellow, and plant the vines somewhat deeper than they stood in the nursery. Plant about eight feet apart, along the fence or building. For vineyard purposes make rows eight feet apart, six feet in rows.

## BLACK SORTS.

Campbell's Early-The wonderful new seedling of the distinguished horticulturist, George W. Campbell, of Ohio. Vine healthy, hardy, vigorous and a profuse bearer; bunch and berry large and handsome; quality $\mathrm{A}_{\mathrm{I}}$ : ripens with Moore's Early, but keeps either on the vine or in the house for weeks. A very great acquisition.


Campbell's Early.
Ives' Seedling - Bunches medium to large, compact. often shouldered; berries medium, slightly oblong, of dark purple color. Early.


McPike.
McPike--Originated by H. C. McPike, of Mount Lookout Park, Alton, Ill. A seedling of Worden, with all its good qualities, unequaled leaf, perfect character in every point, superb quality, color and flavor like the Worden; berries very large, measuring over three inches in circumference; easily the largest grape grown.

Concord-The old stand-by. A large, purplish-black grape; vines remarkably hardy, vigorous and productive. Very popular, best market sort.

Worden-A splendid large grape, of the Concord type, but earlier, and in every way as healthy. Quality good to best.

Norton's Virginia-A most productive grape, both for garden and sineyard, bearing large crops in all seasons. Skin thin, flesh tender, with a brisk, refreshing flavor. Best for a dark wine and for canning. Late.

Moore's Early-Bunch medium, berry large, round with heavy bloom; vine exceedingly hardy, entirely exempt from mildew or disease. Its earliness makes it desirable for an early market. Two weeks earlier than Concord.


Moore's Early.

## WHITE SORTS.

Moore's Diamond-Grape from Concord seed, fertilized with Iona. In vigor of growth, color and texture of foliage and hardiness of vine, it partakes of the nature of its


Moore's Niamond.
parent Concord, while in quality the fruit is equal to many of the best tender sorts, and ripens two weeks earlier than Concord.

Niagara-Vine remarkably hardy, strong grower; bunches very large and compact; sometimes shouldered; berries large, light greenish white; semi-transparent, slightly ambered in the sun; skin thin but tough, and does not crack; quality good, very little pulp, melting and sweet to the center.

Elvira - Very vigorous, strong, healthy grower; bunch and berries are medium size, very compact and productive, often growing 4 and 5 clusters on a single cane. Very hardy.


Brighton.
Brighton-Bunch large, well formed; berries above medium to large, round; excellent flavor and quality, one of the earliest in ripening.
Catawba-Bunches of good size, rather loose; berries large, round; when fully ripe of a dark copper color, with a sweet, rich musky flavor.

Delaware - Bunches small, compact, shouldered; berries rather small, round; skin thin, light red; flesh very juicy, without any hard pulp, with an exceedingly sweet, spicy and delicious flavor.

Perkins - Vine vigorous, productive; bunch compact, shouldered; ripens before Isabella. Color light red.

Agawam (Roger's No. 15) - Berries very large, with thick skin; pulp soft, sweet and sprightly; very vigorous: ripens early.

Woodruff-A large, handsome, red grape, supposed to be a seedling of Concord. Remarkably showy, very large bunch and a profitable market sort. The vine is a strong grower with healthy foliage and entirely hardy; ripens early.

## Stparbepries.

Strawberries will succeed in any soil that is adapted to ordinary farm or garden crops. Soil should be thoroughly prepared at a good depth, well drained and enriched. Vegetable manure (muck, rotten turf, wood soil, ashes, etc.) is the best. For field culture set in rows four feet apart. I8 inches in rows; for garden 15 inches each way, leaving pathway every third row. To produce fine, large fruit, keep in hills; pinching runners off as soon as they appear. Ground should always be kept clean and well cultivated. In winter a covering of leaves, straw or some kind of litter will protect the plants. Do not cover them until ground is frozen, or so deep as to smother the plants, and remove covering before growth starts in spring. Mulching will keep the fruit clean and the soil in good condition through the fruiting season.

The blossoms of those marked with (p) are destitute of stamens and are termed pisti late, and unless a row of perfect flowering variety is planted at intervals, not exceeding about a rod, they will produce imperfect fruit, and but little of it; but when properly fertilized, as a rule, they produce more fruit than those with perfect flowers.

Our land is especially suited to the development of strawberry plants, giving us extra fine crowns and roots. Our stocks are pure, each kind kept by itself and cultivated entirely for the production of plants. Quality counts.


Bunch of our Strawberry Plants-26 Plants in a Bunch.

Glenn Mary-Berry large, often flattened, bright deep red on surface, light red to center; sweet, rich, good flavored.Season, medium to late.

McKinley-One of the finest and firmest of the large berries. Vigorous, healthy and productive. Berries conical, large, dark red, fine form, high quality, and firm. One of the most promising of recent introductions.
Margaret-Remarkably healthy, vigorous growth. productive, large size, and good quality. Season, medium to late, holding its size to the end. Good culture will insure extra large and fine berries in great abundance. Berries usually conical, dark red clear to the center, firm and of excellent flavor.

Nick Ohmer-Very large and stocky, with plenty of strong runners, vigorous growth, and productive. The fruit is of the largest size. Roundish conical form, but under high culture somewhat triangular. Color dark glossy red; firm and of excellent value.


Rough Rider.
Rough Rider-Perfect blossom, productive; vigorous growth, fruit large and attractive; firm, red, fine flavor, sells at highest prices.

Sample-One of the very best berries. Plants strong, large and healthy. Fruit dark colored, uniform size in great profusion, and firm enough to ship well.

Senator Dunlap-Staminate, of pronounced Warfield type. From all reports of the behaviour of this sort, we think it has come to stay. It closely resembles Warfield in foliage and growth, and any success that variety has, it has the advantage of being a staminate sort.

New York - Originated in Tompkins County, N. Y. Is supposed to be a cross of the well known Bubach and Jessie. Very productive; fruit very large, regular, conical, of good color and flavor, and from every appearance will be a valuable variety.

Kansas (p)-This popular new variety originated in the state from which it takes its name. Fruit brilliant crimson through and through. Seems to be destined to become one of the most favorable Strawberries for canning ever produced. Late ripening, and is said to have special drouth resisting qualities.

Wolverton-Plant large; large, fine appearing berry, ripens in midseason. A good cropper.


Seaford-Said to be a better berry than Bubach, but as we have not yet fruited it, could not say what it will do with us.

Brandywine-A fine, large, late, handsome berry of excellent quality, regular coni-


Brandywine.
cal form; dark, glossy red, extending to the center. Plant healthy and vigorous.

Beder Wood-A fine berry for home market or use; berry round, medium in size, regular, plant productive. Especially valuable as a fertilizer. Early.


Clyde.
Clyde - Some of our best strawberry growers recommend this as the nearest approach to the perfect berry. Perfectly healthy, vigorous grower, making strong plants with bright, clean foliage and heavy root system; enormously productive. Fruit large, firm, never varies from its regular conical shape; holds its size to the end of the season. Light scarlet color, beauties in every way.

Charles Downing-An excellent variety, flesh firm, juicy and sweet. A good shipping berry.

Bubach No. 5-Of large and uniform size; fine form and color, great vigor of plant and productive. Leaves large, dark green and endure the hottest sun perfectly.


Bubach No. 5 .

Crescent Seedling (p)-Medium size, bright, light scarlet; plant very vigorous and hardy. A great cropper.

Gandy-A large, late variety, berries bright crimson, uniform size and shape, firm; plant healthy and vigorous.


Gandy.
Greenville (p)-Resembles Bubach, but firmer and a better shipper; uniform in size, excellent quality. Plant a strong grower, free from rust and one of the most productive.

Haverland (p)-Plants large, healthy, vigorous, and ripen their fruit evenly and early. Berries are fine, uniform in shape, large, excellent flavor and bright red color, exceedingly productive.


Jessie-Very large, fine quality. One of the finest early strawberries grown.

Ruby-Origin Illinois. The plant is large and robust, vigorous, hardy and very productive. The blossom is large and strongly staminate. The fruit is large and regular, except the first blossoms, which are apt to be somewhat irregular. Fruit nearly as large as the Bubach, but of a more attractive color, darker crimson and flesh red to the center, retaining its fine color when canned. Its quality is unexcelled.


Marshall.
Marshall - Plant strong and vigorous, with heavy, thick foliage protecting the blossoms and roots. Of the largest size and the first large berry to ripen, scarcely ever misshapen; color dark rich crimson, flesh fine grained, of delicious flavor; firm, keeping and carrying to market well. With high culture it is one of the largest and finest of berries.


Warfield (p)-Plant a vigorous grower, tough and hardy, and astonishingly productive. Fruit large, conical, always of regular form and slightly necked. The color is dark glossy red, holds its color a long time after being picked.

## 

For garden culture dig a trench is inches wide and 12 inches deep, trenches 4 feet apart, fill in some well-rotted manure in bottom of trench; then cover same with top soil about 2 inches. Plant on top of that, IS inches apart in the row, and only cover the plant about 2 inches with good, fine soil, filling in the balance by degrees as the plant grows up. Give them a top dressing of manure annually, early in spring after loosening the beds on top, by forking them over.

Conover's Colossal-A mammoth variety, of vigorous growth, an old and well tried sort; very popular.

Palmetto-Of southern origin.-It is earlier, a better yielder, more even and regular in its growth, and in quality equal to that old favcrite Conover's Colossal.

Columbian Mammoth White-It produces shoots which are white and remain so as long as fit for use. In addition to the marvelous advantage of its white color, the Columbian Mammoth White Asparagus is
even more robust and vigorous in habit, and throws larger shoots and fully as many of them as the Conover's Colossal.


Columbian Mammoth White.

## 

This deserves to be ranked among the best early fruits of the garden. It affords the easiest material for pies and tarts, continues long in use and is valuable for canning. Make the bed very rich and deep. Plant in
rows four feet apart and the plants three fee distant. Set the roots so that the crowns are about an inch below the surface.

Linnaeus-Large, early, tender and fine; the very best of all.


## TREE HYDRANGEA.

The Hydrangea Paniculata Grandiflora is one of the very finest of hardy shrubs, but when grown in standard or tree shape, it is especially showy and striking. It forms a graceful and dwarfish tree not reaching more than 8 to 10 feet in height, and is extremely effective for lawn decorations, whether standing singly or in masses. The immense trusses of bloom appear at just the time when other flowers are scarce, and last from the first of August until frost. It is entirely hardy and very casy to grow.

## Tree Hydrangea

## Every Lover of the Beautiful should have one or more of these Lovely Bloomers

Beautiful as a Shrub they are Grandly Beautiful as a Tree, Growing in Loveliness as they Acquire Age and Size.

## 登金

THE HYDRANGEA PANICULATA GRANDIFLORA is recognized wherever known, and in all latitudes, as decidedly the finest acquisition to the list of hardy shrubs made in the past twenty years. It is as hardy as a native oak, and produces at the ends of the branches great masses of flowers, the individual clusters often being nearly a foot in length. Unequaled for lawns and cemeteries, and appropriate everyzuhere. Give it a trial and you would not part with.it for three times its cost. Our stock is well grown and of extra size, and with care should bloom the first season.

The Hidrangea grows from eight to ten feet high, with large, showy, handsome green leaves, and bears immense cone-shaped heads of pale green flowers, changing to nearly pure white, and again to varying shades of pink and red, produced in August and remaining until cut off by severe frost. Should have rich soil and plenty of moisture to produce best results.

We would like everyone to try this, because we know it will be satisfactory, and satisfaction to our customers is the foundation of our success.


BRIEF SUGGESTIONS TO PLANTERS.

What to plant-Impressed with the importance of planting only the most hardy ornamental trees and shrubs, and in order that our patrons may be spared much disappointment and expense, we have, as far as possible, omitted from our catalogue everything that is liable to suffer from severe cold.

We have with great pains secured, both at home and abroad, all valuable hardy material, so as to render our assortment of this class as complete as possible. An examination of the catalogue shows what an extensive variety of stock is offered, enabling the planter by a judicious use of the same to accomplish any desired result with perfectly hardy trees, shrubs and plants.

For convenience we have grouped the trees under the following heads: Deciduous Trees, Weeping Deciduous Trees, Ornamental Shrubs, Vines and Climbers, Hedge Plants, Perennial Plants and Evergreens. The shrubs have been similarly arranged, and parties desiring to make selections for particular purpeses will find this classification useful.

## For Parks and Extensive Grounds-

No difficulty can be experienced by any one in making selections for this purpose. But we cannot impress too strongly the importance and value of flowering shrubs for effective masses and groups. There are many who imagine that the Rhododendron and Azalea are indispensable. This is a great error. In this latitude both Rhododendron and Azalea require prepared soil and protectịn, while hardy shrubs like the Weigelia, Deutzia, Spiraea, Hardy Hydrangea, Japan

Quince, Double-flowering Almond, Lilac, Snow-Ball, Althea, Paeony, Phlox and Japan Anemone, when planted in masses, produce a magnificent effect, need no protection, and demand little skill or care in their management. What grand masses of bloom can be had throughout the season by proper use of the various families. Then the purple and varie-gated-leaved trees and shrubs may also be planted in such a manner as to afford a rich and striking contrast.

Groups of flowering trees form superb objects at the blossoming season, and it is strange that planters do not employ them more.

Highly effective groups can be formed of trees and shrubs possessing bright-colored bark in winter.

For Lawns and Small Places - Whatever specimens are planted, should be of the finest species, of moderate size, of graceful habits of growth and handsome foliage.

A pendulous tree or one with variegated foliage may be occasionally introduced, and will add to the beauty of the grounds. Depend mainly upon dwarf shrubs for small places, and in selecting, aim at securing a succession of bloom. Dwarf evergreens are very useful, and in small grounds hardy herbaceous border plants can be used with the most satisfactory results. A proper selection will afford as much bloom as ordinary bedding plants, and at half the trouble and expense.
When to Plant-Deciduous Trees, Shrubs and Vines can be planted either in Spring or Fall. Spring is the best time for evergreens generally.

How to Plant-Preparation of the Roots-Cut off smothly 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 frame work 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 Vitæ 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 custorn 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 regular shapes, we destroy their identity. The pruning knife, therefore, should be used to assist nature, and handled with judgment and care; to lop 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 trim 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 thern 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. Weigelias, Deutzias, Forsythias and Mock Orange, flower on the wood of the preceeding years 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.

Spiræas, Lilacs, Althæas, and Honeysuckles may be trimmed during the winter or early in the 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.

## ⓔcidu®as 〒rees.

## ACER.-Maple.

A. Dasycarpum (Silver-Leaved) - A hardy, rapid-growing native tree of large size, valuable for producing a quick shade. Excellent for street planting. Our stock of these is very large in all sizes.
A. Plantanordes (Norway) - A native of Europe. Its large, compact habit, broad, deep green shining foliage, render it one of the most desirable species for streets, parks and lawns.
A. Saccharinum (Sugar)-A very popular American tree, and for its stately form and fine foliage justly ranked among the very best, both for lawn and avenue.
A. Wierii Laciniatum (Wier's CutLeaved) - One of the best cut or dissectedleaved trees, being of a rapid growth, it soon produces an effect. Young shoots slender and drooping.

## AESCULUS.- Chestnut.

A. Hippocastanum (Horse)-This magnificent, large-sized tree has no superior on the lawn. In the spring it is profusely covered with panicles of white flowers dotted with red.
A. Hıppocastanum Var. Rubicunda (Red-Flowering Horse)-A smaller tree in all parts than above, producing deep red flowers. Very ornamental and well adapted for lawn culture.

## ALNUS.-AIder.

A. Laciniata Imperialis (Imperial Cut-Leaved)-A very striking and beautiful tree, with delicate and beautitul leaves; hardy and of vigorous growth; one of the finest cutleaved trees in cultivation.
A. Incana (Black or Speckled)-Oval, dark green foliage. Thrives on drier soils than the other sorts. Desirable.

## AMALANCHIER.-Service Berry.

A. Canadensis (Shad-Flower)-A small, slender tree that bears a profusion of drooping spikes of white flowers, rendering the tree quite conspicuous about the time that shad are running up the rivers. Also grown for its fruit.

## AMYGDALUS.-Almond.

A class of ornamental trees introduced from the mountains of Asia Minor, and succeeding well in common garden soil. The flowers ate very showy, produced in abundance, and useful for their earliness. Fine plants to use in grooping or for lawns.
A. Communis Var. Flore Rosea Plena
(Double-Flowering Almond Tree) - Small, double pink flowers, born in abundance in May.
A. Communis Var. Flore Alba Plena -Double white flowers.

## ARALIA.-Angelica Tree.

Very ornamental foliaged small tree, adapted to a variety of soils, but thriving best in well-drained situations. The immense, finely divided foliage, large, showy heads of white flowers, followed by the showy-colored seed clusters, renders them very effective. As lawn plants or for use in sub-tropical effects they will be found very useful.
A. Spinosa (Hercules Club) - Small. A very showy sort, yet which produces suckers quite freely. Immense clusters of small, white flowers in July.

## BETULA.-Birch.

B. Alba (White) -Of which Coleridge says; "Most beautiful of forest trees, the lady of the woods."

## CATALPA.

C. Bungei (Dwarf) - A small species that grows 8 to io feet high, as broad, forming a great bush, clothed with a dense mass of large, heart-shaped leaves. Among our hardy shrubs there are but few, if any, that are more effective as foliage plants for park or lawn. When grafted on a stalk of one of the tree species 5 or 6 feet high, it makes a handsome standard tree, with a very dense and symmetrical globular head.


Catalpa.-Bungei.

Tea's Japan-A cross between Catalpa Speciosa and the Japanese Koempferii, and in vigorous growth it surpasses either. Has large, luxuriant foliage and large, handsome white flowers, with purple dots and a touch of yellow around the throat, with a pleasant, delicate fragrance.


Catalpa. - Tea's Japan.
C. Speciosa-One of the most rapid growers. Large heart-shaped, downy leaves, and compound panicles of white flowers, tinged with violet and dotted with purple and yellow.

## CERASUS.-Cherry.

C. Avium Plena (Double-Flowering) The double white blossoms, like little roses, cover the tree completely, forming an object of rare beauty.

## CERSIS.-Red Bud.

C. Canadensis (American Judas)-A small tree of irregular rounded form, with pretty foliage, and very showy when in bloom; the branches and 1 wigs are covered with a dense mass of small pink flowers in the fifth month before the leaves expand.

## CORNUS.-Flowering Dogwood.

C. Florida (White flowering)-An American species, of spreading, irregular form, growing from 16 to 20 ft . high. The flowers are produced in spring before the ieaves appear, they are white and very showy. Popular.

## CYTISUS.-Golden Chain.

C. Laburnum - A native of Europe, with smooth and shining foliage. The name Golden Chain a!ludes to the length of the drooping racemes of yellow flowers, which appear in June.

## EUONYMUS.-Spindle Tree.

E. Europaeus-From Europe and a favorite in old gardens. Of good size, with rosy , red pods.

## FRAXINUS.—Ash.

A class of large ornamental trees, adapted to a great variety of soils. Of quite rapid growth and possessing many desirable characters for lawn, street and park planting.
F. Ornus (Flowering)-A native of southern Europe, similar in foliage to our native American form, but producing very showy clusters of fringe-like flowers at the ends of the branches in May or June.
F. Alba (White)-A rapid growing native tree, valuable for planting along streets or in parks; may be extensively planted for timber; largely used in the manufacture of agricultural implements.
F. Excelsior (European) - Large. A more rounded head and darker foliage than the F. Allua.

## GYMNOCLADUS.—Kentucky Coffee Tree.

G. Canadensis-Medium. A strikingly ornamental, irregular, open-topped tree, with peculiar rough-barked and twigless branches and immense, broad, doubly-compound foliage of a peculiar bluish-green color. The flowers are white, in open racemes, followed by immense, long, brown pods. A picturesque and desirable tree.

## HALESIA. - Silver Bell.

Broad, light green foliaged, dense growing trees of small size and,well adapted for lawn culture and grouping with other plants. Their chaste, pure white flowers are produced in abundance along the entire length of the branches as the leaves appear in spring, and give a very charming picture. Best grown in well-drained soil in somewhat sheltered positions.
H. Tetraptera-Small. The hardiest species. Very choice.

## KOELREUTERIA.

K. Paniculata-A charming small tree, a native of China, with glossy, divided foliage, and large, terminal panicles of showy golden-yellow flowers in July, followed by curious bladdery seed-vessels. Its pleasingly colored foliage and neat habit of growth, with its showy flowers, render it a very desirable lawn tree.


European Larch.

## LARIX.-Larch.

L. Europaeus (European)-A beautiful, rapid-growing pyramidal tree, with all the characteristics of an evergreen, except that it drops its foliage in the autumn.

## LERIODENDRON.-Tulip Tree.

L. Tulipefera-One of our very largest native trees, with large, smooth, shining leaves, greenish yellow flowers and an umbrageous head.

## LIQUIDAMBER.-Sweet Gum.

L. Styraciflua-A large native tree, with rough, corky bark, and shining, deeply lobed, star-shaped leaves, changing to deep crimson in the autumn.

## MAGNOLIA.

M. Acuminata (Cucumber Tree) - A beautiful and symmetrical, tall tree, with large leaves; excellent for lawns and avenues.
M. Purpurea-Deep purple, and pink in throat; a dwarf, bushy variety, that blooms at intervals all summer.

## PERSICA.—Peach.

P. Flore Rosea Plena (Double Flower-ing)-Flowers pale rose color, double, produced in great abundance and very handsome.

## PLATANUS.- Sycamore, or Plane.

P. Occidentalis (American Plane)-A tree of the largest size, growing rapidly, very ornamental and entirely hardy. Fine for street planting.
P. Orientalis (European Plane)-A lofty, wide-spreading tree; large five-lobed leaves; valuable for its handsome foliage; and free growth; makes an excellent street tree.

## POPULUS.-Poplar.

P. a. Pyramidalis (Lombardy) - This grows to an immense height, and is remarkable for its columnar growth.


Carolina Poplar.
P. Monilifera (Carolina)-A vigorous, healthy, native tree of rapid growth, pyramidal in form, with large, glossy leaves; valuable for park or street planting.
P. a. Bolleana (Silver)-New, pyramidal form, leaves dark-green on upper side, brilliant silver beneath. Very beautiful.
P. m. Aurea (Golden)-The golden yellow foliage, retaining its brilliancy throughout the season.
P. Graeca (Grecian)-This sort is probably identical with P. Tremuloides (American Aspen), leaves roundish-cordate, with a short, sharp point, end small, somewhat regular teeth, smooth on both sides; tree spreading, much more so than P. Monilifera, and we think longer lived, a very pretty Poplar for street planting.

## PRUNUS.-Plum.

P. Pizzardi (Purple Leaved)-A very remarkable and beautiful tree with black bark and dark purple leaves, remaining so until late in the fall.
P. Triloba (Double-flowering) - A beautiful small tree or shrub of fine habit, with elegant, double, rosy flowers, set very closely on the slender branches.


Bechtel's Crab.

## PYRUS.-Crab.

P. Malus Augustifolia Plena (Bechtel's Double-flowering)-The beauty and delicate fragrance of the bloom of the sweet-scented Crab is a theme for poets, and this new variety is a gem among hardy plants. The flowers are sometimes mistaken for small pink roses, and the perfume tends to increase rather than correct the delusion.

## PTELIA.-Hop Tree.

Very choice lawn tree of small size, with handsome deep green, glossy trifoliate leaves, which, if bruised, exhale a pleasant, hop-like cdor. This odor is especially noticeable in the seeds, which are borne in dense, showy clusters in late summer. They are of easiest culture in any soil. The golden variety is a new introduction of the first merit.
P. Trifoliata (Wafer As/) - Showy when used singly, and admirable for grouping.
P. Trifoliata Var. Aurea (Golden)One of the showiest golden-foliaged trees in cultivation. The peculiar glossy surface of the foliage gives an appearance that the leaves have been varnished. It is one of, if not the highest colored, golden-foliaged hardy plant, retaining its color all summer.

## PYRUS. - Sorbus Mountain Ash.

P. Aucuparia (Mountain)-A small tree with shining, pinnated leaves and large cymes of white flowers, followed by clusters of bright red fruit.
P. Finnatifida (Oak-Leaved Mountain Ash) - A hardy tree of pyramidal habit. Foliage simple and deeply lobed, bright green above and downy beneath. A fine lawn tree.

## SALISBURIA.-Maiden Hair.

S. Adiantifolia-A native of China and Japan, forming a medium or large tree, leaves fan-shaped. Tree of a rapid growth and belonging to the Conifera.


Salisburia.

## SOPHORA.

S. Japonica-A small tree, with smooth, dark green bark, pretty pinnate leaves, and white peashaped flowers in drooping clusters.

## TAXODIUM.-Cypress.

T. Distichum (Deciduous) - A distinct and handsome tree of slender habit, with soft, feathery foliage. The trunk is as straight as an arrow and tapers regularly from base to tip, as stiff and dignified as a church spire. Although a native of southern swamps it does well in cities, it is a favorite in our St. Louis Parks, especially "Tower Grove Park," in which are some of the finest specimens. Our stock of these valuable trees is very fine.

## TILIA-Linden.

T. Americana (American)-A fine pyramidal tree, with large sized leaves and fragrant flowers.
T. Europæa (European)-A fine pyramidal tree, with medium sized leaves and fragrant flowers.
T. e. Platiphylla-A tree of about the same size as T. Europaea, but readily distinguished from it by its larger and rougher leaves.

## ULMUS.-EIm.

U. Americana (American)-The noble, drooping, spreading tree of our woods. One of the grandest of park or street trees.
U. Campestre (English)-A native of Europe: a noble, rapid-growing tree, forming a dense head; a desirable tree for streets, avenues, etc.

## Weeping ©eciđuఠas Ørees.



Cut-leaved Weeping Birch.
BETULA.-Birch.
B. Alba var. Laciniata Pendula Cut-Leaved Weeping) - Trunk straight,
slender, white as snow; branches hanging in long, pendulous threads from a great height; leaves finely cut; a universal favorite.

## Tea's Weeping Russian Mulberry.

A graceful and beautiful, hardy tree, forming a perfect, umbrella-shaped head, with long, slender, willowy branches, drooping to the ground and gracefully swaying in the wind. Foliage small, lobed and of a delightful, fresh, glossy green. Admirably adapted to cemetery planting. (See lithographed insert.)

## WEEPING WILLOWS.

Kilmarnock - An exceedingly graceful tree. Fine for small lawns.

Babylonica - A well-known and most graceful tree of large size. Its fresh, bright green tint and long, wavy branches make it very attractive.

Wisconsin - Of drooping habit and beautiful form. The most hardy of all our Weeping Willows.

New American - An American dwarf, slender branched species; grafted five or six feet high it makes one of the most ornamental of small weeping trees.

Camperdown Weep=

## ing Elm.

One of the finest weeping trees for the lawn, with broad foliage and branches weeping gracefully to the ground.


Camperdown Weeping Elm.

## ©pramental Shpabs.

Once carefully planted in suitable position, they increase in size and beauty from year to year, and require but little care. The time of bloom of the different sorts extends over nearly the whole season.

Our selection of HARDY SHRUBS is one of the finest and most complete in the west. To parties desiring to lay out new grounds or to fill out missing sorts, we would kindly ask correspondence or better an inspection of our stock, which we will be pleased to show at all times.

## ALTHAEA.-Hibiscus.

(Rose of Sharon.)
The Althaeas are fine, hardy, free growing, flowering shrubs, of very easy cultivation, and very desirable on account of their late summer-blooming. Should be in every garden. Our collection comprises a great variety of colors and shades.
A. Ardens-Double violet, $2 \frac{1}{2}$ to 3 inches across flower; petals quilled, vigorous, very fine.
A. Boule De Feu-Large, $3 \frac{1}{2}$ to 4 inches across flower; very double, well formed, light rose; petals flecked at base with cardinal, one of the finest reds, vigorous.
A. Leopoldii- $2 \frac{1}{3}$ to 3 inches across flower; very doubly, deep rose.
A. Pompon Rouge - $3 \frac{1}{2}$ to 4 inches across flower; color light rose, outer petals broad and show cardinal base; inner petals quilled; show fine stamens distinct, fine, vigorous.
A. Pulcherrima-Very large, $3 \frac{1}{2}$ to 4 inches across flower; double white, shaded to pink; outer rows of petals broad and show cardinal base; inner petals quilled; we think the finest in the collection; strong grower.
A. Coelestis-Beautiful, large, single, four inches and upwards in diameter. Color a delicate shade of azure blue, fine and distinct.
A. Alba-Double, white.
A. Rubra-Double, red.
A. Purpurea-Double, purple.

## A. Var. Flore Plena-

 Double, rose flowers, variegated leaves.
## BERBERIS.

B. Thunbergii - From Japan. A very pretty species, of dwarf habit, small foliage, changing to a beautiful coppery red in autumn. Valuable as an ornamental hedge.
P. Var. Purpurea (Pur-ple-Leared)-A fine shrub, growing 3 to 5 feet high, with violet purple foliage and fruit; blossoms and fruit beautiful; very effective in groups, hedges or planted. by itself.


Calycanthus Floridus.

## CALYCANTHUS.

(Carolina Allspice.)
C. Floridus-A well-known native bush, bearing very double, purple, fragrant flowers.

## CEANOTHUS.

(New Jersey Tea.)
C. Americanus-A low bush, an early bloomer, small white flowers in great profusion.

## CHIONANTHUS.

(White Fringe.)
C. Virginica-A small, native tree, with ash-like leaves and clusters of snow white flowers, resembling an elegant fringe.


Chionanthus.

## CLETHRA.-Sweet Pepper Bush.

C. Alnifolia-A pretty little shrub that blossoms freely for several weeks in summer; very fragrant white flowers, in slender racemes, an excellent honey plant for bees.

## CORNUS.-Cornel or Dogwood.

A valuable class of shrubs, with handsome variegated foliage in some, ornamental bark in others, and all with showy heads of flowers, followed by ornamental fruits. All of easy culture in most soils.
C. Mascula (Cornelian Cherry)-April. A small tree or large shrub with showy, yellow flowers in early spring, followed by deep scarlet fruit.
C. Sanguinea (Red Ozier) - June. Flowers greenish white, in flat cymes, followed by white fruit; bark deep red and very attractive in winter. When planted with other


Sweet Pepper Bush.
shrubs, the effect in winter is very striking. As a single lawn shrub it is well adapted, owing to its low branching habit and ornamental broad foliage. One of the best.
C. Siberica (Siberian Red Ozier)-A possible form of the Cornus Sanguinea with intensely colored bark of the deepest crimson. Fine.

## COTONEASTER.

Desirable garden shrubs on account of the beauty of their foliage, flowers and fruits. Although natives of the Himalayas, they are quite hardy as far as tested, yet a somewhat protected situation is a safe plan.
C. Frigida-May and June. A sub-evergreen shrub with dark green, elliptical foliage, snowy white flowers in abundance and followed by ornamental crimson fruits, ripening in September and remaining on the most of the winter.
C. Simondsii (Simond's)-A fine kind, with deep orange fruits.

## CORYLUS.-Hazel or Filbert.

## C. Avellana Var. Atropurpurea (Pur-

 ple-Leaved Filbert) - A very conspicuous shrub, with large, dark purple leaves. Distinct and fine.
## CORONILLA.-Scorpion Senna.

A showy plant, succeeding best in light, well-drained soil.
C. Emerus-A dense, symmetrical shrub with deep, glossy green, compound foliage and showy yellow flowers, conspicuously tipped with red. A choice shrub, blooming freely in May and June.

## CYDONIA.-Japan Quince.

C. Japonica-Flowers very abundant, brilliant crimson scarlet. Fine for hedging.


## COLUTEA.-Bladder Senna.

Fast-growing shrub, thriving in any soil.
C. Arborescens (Tree Colutea)-July. Foliage compound, of a pleasing green; flowers pea-shaped, yellow and brownish red, followed by showy, curiously inflated, reddish seed-pods. This is the shrub which grows native on Mount Vesuvius, and the last one seen in ascending to the crater.

## CYTISUS.-Laburnum.

(See Deciduous Trees.)

## DEUTZIA.

Showy Japanese shrubs of the highest ornamental merit, and adapted to all good soils. Their clean foliage, upright, dense growth, and free flowering nature, renders them especially valuable.


## Deutzia.

D. Crenata Plena (Double Pink)-All the Deutzias are valuable and very profuse bloomers in the sixth month, This is one of the prettiest tall-growing varieties.
D. C. Candidissima (Double White)Very pretty; pure white.
D. C. Pride of Rochester-A fine double variety, rather earlier than D. Crenata. Flowers pink in bud, but white when fully expanded.
D. C. Watereri-A new white variety from England, with larger and more double Howers.
D. Gracilis (Dwarf)-A low bush, 3 or 4 feet diameter; flowers pure white and graceful. One of the prettiest and most popular small shrubs. Fine for winter forcing.
D. Hybrida Lemoineii. - A hybrid obtained by Mons. Lemoine of France, by crossing the well known Deutzia gracilis with Deutzia parviflora. Flowers pure white, borne on stout branches, which are of upright growth. Habit dwarf and free-flowering. A decided acquisition.

## ELEAGNUS LONG= IPES.

A handsome, shapely, silver-leaved shrub, with an ornamental reddish brown bark in winter; perfectly hardy and easy to grow. The bright, yellow flowers appear in June on long stalks, but the greatest value of the shrub is in the fruit, which is produced in

the greatest abundance along the whole length of the branches, as shown in the cat; oval in shape and about one-half inch long; color deep orange red, very showy and attractive. The fruit is not only very ornamental, but has a sprightly sharp, pleasant flavor and makes a delicious sauce when cooked.

## EXOCHORDA.-PearI Bush.


E. GrandifloraA very hardy and handsome shrub trom northern
China and Japan, forming a bush io to 12 feet high in asmany years. The pure, white flowers are borne in clusters, on light, wiry branches, which bend beneath their load of bloom enough to be airy and graceful. and the unexpanded buds are like small, round beads of pearly whiteness.

## FORSYTHIA.-Golden Bell.

F. Suspensa-A very early and showy spring bloomer; flowers bright yellow; branches long and slender.

## HALESIA.-Silver Bell. (See Deciduous Trees.) <br> HYDRANGEA PANICULATA GRANDIFLORA.

This is one of the most valuable hardy shrubs in cultivation. It attains a height of six to eight feet and is perfectly hardy in all parts of the country. The flowers are white, borne in immense pyramidal panicles nearly a foot in length. It commences flowering in July and continues until November. This is the finest flowering shrub for cemetery planting we know of.


[^1]
## HYDRANGEA.-Tree Shaped.

These are fine specimen plants 4 to 5 feet high trained to tree shape with about 3 feet of straight stem and nice shaped heads. Should bloom profusely the first year.
(See lithographed insert)

## HYPERICUM.-St. John's Wort.

Elegant medium or small-sized shrubs of easy culture in any soil. Valuable for grouping with other shrubbery near the outer edge, or a group of the various species of the class alone would produce an excellent effect. Useful to grow in sandy situations.
H. Aureum-July to September. One of the grandest of medium growing shrubs, forming a dense, globular head, and producing a constant succesion of intensely brilliant, golden-yellow flowers in the greatest abundance for a period of several weeks. The foliage is of pleasing color and shape. Very choice.


Hypericum Aureum.
H. Patulum-July. Low-spreading habit, showy yellow flowers.

## KERRIA (Corchorus).-Globe Flower.

Handsome, free-flowering shrubs, thriving in common garden soils.
K. Japonica-All summer. Handsome, light-green, finely toothed foliage and showy flowers, freely and continuously produced.
K. Japonica Var. Follis Variegata (Variegated leaved) - A choice sort, with beautifully variegated silver and green foliage. Elegant at the edge of shrubberies.

## LESPEDEZA.-Bush Clover.

A charming shrub for all soils, valuable for single planting or grouped with other shrubs.
L. Bicolor-Very rare Japanese plant, forming a large shrub or small tree, with a very effective pendulous tend of the branchlets. The foliage is clover-like and flowers are pea-shaped, pink and white and borne in drooping clusters from axils of the leaves, and in such profusion as to bend the branches with their weight.


Philadelphus.

## PHILADELPHUS.-Syringa or Mock Orange.

For grouping with other shrubs, forming large screens or hedges which may not require pruning, or ustd as single specimen lawn plants, they are desirable. They will bear heavy pruning, and quickly reassume their free, semi-pendulous, picturesque effect.
P. Coronarius (Mock Orange) - Early June. Fragrant pure white flowers, in dense clusters so numerous as to bear the branches down when flowering. One of the best.
P. Coronarius Var. Plena (Doubleflowered Mock Orange)-A semi-double form.
P. Coronarius Var. Follis Aureus (Golden Syringa) - A dense-growing form, with clear, golden yellow foliage, well retained in color all summer. One of the best golden-foliaged shrubs offered.

Ph. Lemoineii Erectus-A charming variety of upright growth; flowers small, yellowish white, fragrant, completely covering the plant.
P. Sanguineus-A native species, with long, dull, red branches and numerous, medium sized, white flowers. Resembling orange blossoms.

## POTENTILLA.-Cinquifoil.

A dense, medium growing shrub of easiest culture in any soil, and succeeding admirably in the driest situations.
P. Fruticosa-July to September. Narrow foliage with silky under-surface. Flowers yellow and borne in continuous succession for a long season.

## PRIVET.-Ligustrum.

L. Ovalifolium (California Privet) - A vigorous, hardy variety, of fine habit and foliage nearly evergreen. Makes a desirable ornamental shrub as well as hedge. We are St. Louis headquarters for this valuable hedge plant, our stock comprises upwards of 50,000 plants in the various sizes.
(See lithographed insert.)

## RHODOTYPUS.-White Kerria.

R. Kerrioides-A choice and rare Japanese shrub, recently introduced. It is a slender-branched bush, with very pretty, deeply veined leaves, and pure white flowers, borne at intervals all summer.


## RIBES.-Currant.

Vigorous, remarkably healtny plants, of easiest culture. Besides their ornamental foliage and flowers, the fruit of several of the sorts is showy and very attractive. Valuable for grouping as a class or with other shrubs.
R. Aureum (Missouri Currant)-May. Golden-yellow, spicily fragrant flowers in showy racemes. Foliage shining and glabrous, taking on showy, autumnal coloring.
R. Gordonianum (Gardon's Currant)May and June. A valuable hybrid with orange-red flowers in showy spikes. Very choice.
R. Sanguineum Var. Flore Plena (Double crimson-flowering) - Flowers very double, showy. This and its type do best in somewhat protected situations.


Rhus Glabra.
S. Anthony Waterer-A new, crimsonflowered variety, one of the most beautiful ot dwarf flowering shrubs. It makes a low, compact bush, 15 to i8 inches high, and is covered neariy the whole growing season with large umbels of deep crimson flowers. Perfectly hardy, it makes a fine, compact plant for low clumps or for bedding purposes. Grown as a pot plant, it is a fine plant for house decoration.
S. Billardii-Medium-sized shrub, producing spiked panicles of flowers, bright rose color.
S. Collossa-A choice species; flowers in flattish umbels, bright pink and very showy.
S. Prunifolia-Very distinct, with numerous small, double white flowers, blooming early.
S. Reevesii-One of the most ornamental. Showy flowers, pure white, in umbels and very numerous.
S. Reevesii Fl. Pl.-A perfect gem; each individual flower as double as a Ranunculus and very conspicuous.

## RH US.-Sum ach.

R. Cotinus (Purple Fringe) A much admired small tree or shrub for its curious fringe or hair-like flowers that cover the whole surface of the plants in middle summer.

## R. Glabra Var. Laciniata

 (Cut-Leaved) - A variety with deeply cut, fern-like foliage. An elegant plant for groups or the lawn.
## SAMBUCUS.-EIder.

Rapid-growing shrubs, with ornamental foliage, flowers and fruit. Will thrive in all soils, but give best fruiting results in that of a moist nature.

The Golden Eider is one of the finest golden-leaved shrubs and is very useful. It shows its color best on a dry soil.

## S. Nigra Var. Aurea (Golden)-

 A beautiful golden-foliaged form. Very useful for foliage effect.
## S. Nigra Var. Laciniata(Cut-

 Leaved)-Deeply cut foliage.S. Nigra V́ar. Variegata (Variegated) Foliage beautifully variegated with silver and green.

## SPIREA.-Meadow Sweet.

An indispensible class of small to me-dium-sized shrubs, embracing a wide range of foliage, habit of growth, color of flowers and season of blooming. All of easiest culture in all soils.


Spirea Anthony Waterer.
S. Opulifolia Aurea-Very conspicuous from the golden hue of its foliage; of strong growth.
S. Douglassi-Immense terminal spikes of deep rose colored flowers. One of the best.
S. Van Houtte-The grandest of all the Spireas. It is a beautiful ornament for the lawn at any season, but when in flower it is a complete fountain of white bloom, the foliage hardly showing. Clusters of twenty
to thirty flat white florets make up the raceme, and these clusters are set close along the drooping stems. Perfectly hardy and an early bloomer.
S. Thunbergii (Thunberg's) - Dwarf habit and round, graceful form; branches slender and somewhat drooping; foliage narrow and yellowish green. Flowers smali, white. Esteemed on account of its neat, graceful habit and early blooming.

## SYRINGA.-Lilac.

S. Persian-Of more slender growth and finer foliage than the common Lilac. We have these in red and white colors.
S. Vulgaris (Common Lilac)-Large shrub, with larger leaves and flowers than above. Flowers bluish purple.
S. V. Alba-Flowers in slender panicles, pure white and fragrant.
S. Josikaea. (Hungarian Lilac)-A fine distinct species, of tree Iike growth, with dark, shining leaves and purple flowers in June, after the other Lilacs have done blooming. Esteemed for its fine habit and foliage.
S. Rhotomagensis var. rubra (Rouen Lilac). A distinct hybrid variety, with reddish flowers; panicles of great size and very abundant. One of the finest Lilacs.
We have added to our list the following new and desirable varieties of single and double Lilacs, of which we give brief descriptions.
S. Japonica (Japan Lilac)-A species from Japan, becoming a good sized tree. Foliage dark green, glossy, leathery; flowers creamy white, odorless, in g.eat panicles. A month later than other Lilacs.
S. V. Alphonse Lavellei-Large trusses, lilac purple. Double.
S. V. Belle de Nancy-Large branched trusses, pinkish white, fine. Double.
S. V. La Tour de Auvergne-Large branched trusses, very full, flowers large, beautiful purple, buds reddish. Double.
S. V. Mad. Abel de Chatenay-Solid trusses, medium size, very full, flowers milk white. Double.
S. Villosa-A species from Japan. Large branching panicles; flowers light purple in bud, white when open, fragrant. Especially valuable for its late flowering. Single.
S. Var. Charles $\mathbf{X}$ - A strong, rapid growing variety, with large, shining leaves; trusses large, rather loose, reddish purple. Single.
S. Var. Ludwig Spaeth-Panicle long, individual flowers large, single; dark purplish red; distinct; superb. The finest of its color.
S. V. Mad. Lemoine-Solid trusses, large florets of purest white. Double.
S. V. Pres. Carnot-Fine, large, pyramidal trusses, pale lilac with white center. Double.
S. V. Pres. Grevy-Very large, branched trusses, flowers large, rosy-lilac, changing to lilac. Double.

## TAMARISK.-African Tamarix.

T. Africana-A tall, graceful shrub with small foliage like a Juniper, and delicate, small rosy purple flowers, produced in spikes; very pretty.

## TARTARIAN HONEYSUCKLES.

Red-Beautiful pink and rose colored, blossoms in June.
White-Flowers white, bloom in May and June.

## VIBURNUM.-Snowball.

V. Opulus-An old and well-known shrub, bearing large balls of pure white flowers.
V. Plicatum (Chinese) - A rare and exceedingly beautiful species from China; flowers in large globular head, pure white, hanging long on the bush; a very choice and desirable shrub.


## WEIGELIA.-Diervilla.

Beautiful shrubs that bloom in June and July. The flowers are produced in so great profusion as almost entirely to hide the foliage. They are very desirable for the border or for grouping, and also as specimen plants for the lawn.
*W. Almabilis Alba-Flowers white, changing to light blush at maturity. Strong growth.
W. Rosea-One of the most popular shrubs known. Flowers bright rose.
W. Rosea Nana Variegata-An exceedingly pretty variety, the variegation being very distinct.
W. Rosea Var. Kosteriana Follis Variegata (Koster's Weigelia) - Foliage beautitully margined with yellow; flowers pink.
W. Lavallei-A new hybrid sort, with dark reddish purple flowers, that blooms more than once during summer.
W. Desboisii-A beautiful variety, with deep, rose-colored flowers, resembling Rosea, but flowers much darker. One of the best.
W. Floribunda. A fine variety, flowers dark red. A protuse bloomer.
W. Candida. Of vigorous habit, flowers pure white and produced in great profusion in June, and continue to bloom at intervals throughout the summer.

W, Eva Rathke. A charming new Weigelia, flowers brilliant crimson; a beautiful, distinct, ciear shade.

## Oines and ©limbers.

## AMPELOPSIS.

A. Veitchii-Of Japanese origin; entirely hardy, with foliage, turning brilliant red in the autumn. It clings tightly to walls, and is unsurpassed as a basket or vase plant.
A. Quinquefolia (American Iny or Virginia Creeper) - Has beautiful digitate leaves that become rich crimson in autumn; a very rapid grower. One of the finest vines for covering walls, verandas or trunks of trees.
A. Engelmannii-Shorter jointed than Quinquefolia. A good climber, grows 6 to of feet in a season.


Aristolochia Sipho.

## ARISTOLOCHIA SIPHO.

## (DUTCHMAN'S PIPE.)

A fine, hardy climber and well known in some parts of the country as Chinese Yam. The tubers grow very large and are edible, like a sweet potato. The vine is a beautiful, rapid grower, producing sweet-scented flowers.

## CLEMATIS.

A beautiful class of hardy climbers, excellent for pillars or trellises. They delight in a rich soil, a sunny situation, and are perfectly hardy.
C. Coccinea-A native southern species, quite hardy, flowers small, bright scarlet; a very interesting plant.
C. Flamula-Sweet scented, the flowers are small, pure white and very fragrant.
C. Henryii-A magnificent, large, white flower, a free grower and most profuse bloomer.
C. Jackmanii-Deep violet purple, with a rich velvety appearance. One of the best


Clematis Jackmanii.
C. Paniculata-A vine of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy. green foliage. The flowers are of medium size, pure white, borne in immense sheets, and of a most delicious and penetrating fragrance.
C. Madame Edward Andre-Flowers large, of a beautiful bright velvety red, very free-flowering, and continuous bloomer.
C. Viticella Rubra-A splendid variety of the utmost profusion of bloom; flowers of medium size and of bright wine-red color. A strong, free grower.

## WISTERIA.

W. Sinensis (Chinese)-Flowers in clusters, pale blue; sometimes gives a second crop of flowers in the fall.
W. Sinensis Alba-Of similar habit to Sinensis, with pure, white flowers.


## HONEYSUCKLE.

H. Aurea Reticulata-A variety with beautifully variegated foliage; leaves netted and veined with clear yellow; flowers yellow and fragrant.
H. Chiness Evergreen-Blooms at intervals through the summer and retains its foliage late in winter. Flowers nearly white, quite d stinct.
H. Halleana-Color white, changing to yellow; very fragrant; blooms from June to November.
H. Monthly Fragrant-A fine, rapid growing variety; flowers large and very fragrant; color red and yellow; a constant bloomer.

## ศedge

To secure a good hedge it is necessary to plant well. Dig a wide, deep trench, and work the soil thoroughly into the roots. Stamp the ground firmly so that each plant will be set as solidly as a post, then mulch heavily with loose manure for a distance of one to two feet on either side, according to the size of the plants. This is especially necessary with Evergreens, and all exposure of the roots to the sun and air must be strictly avoided. Evergreens should not be planted in the Fall.

## DECIDUOUS HEDGE PLANTS.

## OSAGE ORANGE.

Highly esteemed at the West and South. Not hardy enough for the Northern States.

## JAPAN QUINCE.

Unquestionably the finest of all plants for an ornamental hedge. Grows very compact; will submit to any amount of pruning, while the brilliant and showy scarlet flowers make it exceedingly attractive in spring.
H. Scarlet Trumpet-A strong, rapid grower; blooms very freely the entire season; bright red, trumpet-shaped flowers.


Honeysuckle.

## IVY-Hedera.

The Ivies are evergreens and frequently suffer from exposure to the sun in winter. For this reason, the north side of a wall or building is a better situation than the south.
H. Hibernica (Irish Ivy)-The wellknown old sort.

## 〇Olants.

## CALIFORNIA PRIVET.-Ligustrum Ovalifolium.

This is the most glossy-leaved and rapid growing of all the half-evergreen plants used for low hedges around private lawns, and is the universal favorite. Entirely hardy and adapted to all parts of the country.
The following are also very desirable for ornamental hedging, description of which will be found under the proper headings in this Catalogue.
Althæas, Roses, Tartarian Honeysuckle. Philadelphus, Spiræas, Berberry.

## EVERGREEN HEDGE PLANTS.

All described in their appropriate places in this Catalogue.
American Arbor Vitae, Siberian Arbor Vitae, Hemlock, Globe Arbor Vitae, and Norway Spruce.

## THE MOST BEAUTIFLL OF HEDGES.


(Ligustrum ovalifolium,)
ONE OF THE MOST BEAUTIFUL OF HEDGES.

## Tear down unsightly fences and improve and enhance the value of your property by using Privet.

THIS is a very ornamental shrub, with thick, glossy, nearly evergreen leaves. It is perfectly hardy, and succeeds everywhere. As a low hedge around private lawns it is unequaled; and its handsome appearance, when so used, tends to greatly enhance the beauty and value of the property. Also, as a border for cemetery lots it is very desirable and beautiful.

The idea of planting hedges for use and ornament is a practical one, and rapidly becoming appreciated and popular.

They serve as a protection against fierce winds, and we know that our gardens are earlier and our fruits ripen better when protected by such screens. Nothing is more beautiful than a well kept hedge to serve as a boundary line between neighbors, or as a division between lawn and garden, or as a screen to hide unsightly places. By using medium sized plants a hedge can be made as cheaply as a good board fence, and then, with a little care it is becoming every year more and more "a thing of beauty and a joy forever," while on the other hand the board fence is going to decay. We all know that such hedges constitute the principal attraction in our best kept places.

To secure a good hedge it is necessary to plant well. Dig a deep, wide trench and work the soil thoroughly about the roots; press the ground thoroughly and mulch heavily for a distance of two or more feet on either side, according to size of plants.


## HYBRID PERPETUAL.

This class of roses is admirably suited for garden culture, for the formation of rose beds, hedges and permanent plantations, where hardy varieties of roses are desired. They are of easy culture and luxuriant in a deep, rich soil. They are benefited by mulching in the fall of the year. Prune according to the habit of the growth, cutting back close all weak shoots and shortening the long canes to a convenient length.

All roses offered by us are strong, fieldgrown plants and will be sentout in dormant condition.

## NEW HARDY YELLOW ROSE.

'sSoleil D'Or'" (Golden Sun) - New hardy yellow Rose. This magnificent variety, like the Persian Yellow, is perfectly hardy. It retains a good deal of the character of the Persian Yellow, the bark of the wood being reddish, the thorns very fine, the foliage more ample, and the leaves, of a beautiful clear green, are closer together. Its growth is robust, very vigorous. The flowers are large, full, and globular, measuring $3 \frac{1}{2}$ inches across, and fragrant; buds conical shaped; color superb, varying from gold and orange yellow to reddish-gold, shaded with nasturtium red. The color stands the sun well. This should be a very valuable Rose. The above is the description of the originator.

Alfred Colomb - Carmine crimson; large full, fine globular form.

Anna Diesbach- Bright rose color, very large and showy; particular fine in bud; flowers slightly cupped. A vigorous grower; one of the best.

American Beauty-Deep pink, shaded with carmine; large, globular.


Anna Diesbach.
Baron de Bonstetten-Flowers large, very double and full, color a rich dark red, passing to deep, velvety maroon; highly scented.

Coquette des Alps-One of the finest pure white hybrid perpetuals; large, full,
finely formed flower; color pure white, sometimes faintly tinged with pale blush; profuse bloomer.

Coquette des Blanches-One of the best white Roses of its class; fine form, pure white, with beautiful, shell-shaped petals. Very suitable for cemetery planting.

Fisher Homes-Like Gen. Jacqueminot, but the flowers are fuller and more freely produced.

La Reine-Glossy rose, large, full, and very free-flowering.

Mad. Masson-Large and double; color a reddish crimson; of fine form; a fine, autumn bloomer.

Gen. Washington- Perfectly double, large, fine form. Color soft scarlet, sometimes glowing crimson.

Clio-Flesh color, flowers often 6 inches in diameter; very fine.

Gen. Jacqueminot-Brilliant crimson; very large, globular and excellent; a free bloomer, unsurpassed in its clear, rich crimson, scarlet color.
Jules Margottin-Carmine rose; large, full, free bloomer, of vigorous habit.

Marchioness of Lorne - Flowers large, of an exceedingly rich and fulgent rose

color, slightly shaded in center with vivid carmine; very sweet, full and finely cupshaped.

Mrs. R. G. Sherman Crawford-This lovely new hybrid is one of the few large flowering roses that bloom constantly and are perfectly hardy. Color deep rosy pink, the outer petals are tinted with pale flesh in quite a new and unique shade; white at base of petals.

Mrs. John Laing-Delicate pink, fragrant, a continuous bloomer.


Mrs. John Laing.

Paul Neyron-Flowers of immense size, often five inches in diameter. Color deep clear rose, very fresh and pretty. The plant is a strong, healthy grower, with glossy foliage and is one of the most prolific bloomers in the Hybrid class; young plants in the nursery rows blooming almost without intermission from June to late in October. (See illustration on third page cover.)

Mad. Schwaller - A remarkable rose, having the strength and style of the Hybrid Perpetual and the free flowering qualities of the Tea; color deep rosy flesh, deepening on edge of petals.

Prince Camille de Rohan-Very dark. This rose is of a rich velvety crimson, passing to an intense, maroon shaded black, large, full flowers. One of the darkest roses and very handsome.


Prince Camille de Rohan.

## CLIMBING ROSES.

Crimson Rambler-This is one of the most decided novelties in roses we have had for years. The plant is a viogrous grower, making shoots from eight to ten feet long in a season. A charming pillar rose; for covering trellises or buildings there is nothing finer. The flowers are grown in great pyramidal panicles, each carrying thirty to forty blooms; the individual flowers are one to one and one-half inches in diameter and remain in perfect condition on the plants for a long time. The color is bright, vivid crimson, showing none of the purplish tint so commonly seen in crimson roses.

White Rambler (Thalia) - In habit of growth, foliage, manner of blooming and shape of flower this is identical with C. Rambler, differing only in color, which in Thalia is a pure, clear white.
Yellow Rambler (Aglaia) - A new, hardy, yellow climbing rose, blooming after the same manner as Crimson Rambler in large clusters: flowers of medium size in immense clusters; very sweet scented. Color a clear, decided yellow, a color heretofore unknown in a climbing rose that was in any way hardy. A strong plant; in full bloom makes one of the finest pillar or porch plants imaginable.

Empress of China - It commences blooming early in the spring and continues until the ground freezes solid. Very fragrant, is of beautiful form, especially valuable for button-hole bouquets. Color deep red in


Rambler Rose.
the bud, changing to pink and red, like an apple blossom. It is nearly double, with waxy appearance like a Tea Rose. Well worthy a trial by all lovers of the rose.

Baltimore Belle-Nearly white, with a faint blush.

Queen of the Prairie-Large clusters of red flowers. Very hardy.

MOSS ROSES.
Perpetual White Moss-Pure white; blooms in clusters.

Crimson Globe Moss - A beautiful crimson; has the fine form of H. P's.

## HYBRID TEA and EVERBLOOMING ROSES.

Etoile de Lyon-Lemon yellow; best bedding rose of its color.

Hermosa-It would be but a waste of words to write a lengthy description of Hermosa. It is too well known and too great a favorite. It is always in bloom and always beautiful; the color is the most


Moss Rose.
pleasing shade of pink, very fragrant. A grand rose for bedding or pot culture.

Meteor-We have no red Rose that is better for general purposes or that gives as many perfect shaped flowers on nice, long stems. The color is rich, velvety crimson, exceedingly bright and attractive. The plant is of vigorous growth, and very free flowering; a constant bloomer. Fine for summer bedding or pot culture.
Duchess de Brabant-In this variety we have a combination of rich and peculiar coloring, delightful perfume and a remarkable profusion of bloom and foliage; color light rose, with heavy shading of amber and salmon. Quite hardy.


ETOILE DE LYON.

Mad. Pierre Guillot-Large, globular flowers, full and double; color delicate orange yellow, distinctly veined and bordered with clear pink; very unique and beautiful.

Clothilde Soupert (Poly)-Pearly white; very double, produced in clusters, very freeblooming.

La France (Hybrid Tea)-Silvery rose.
Souvenir de Wootton-The color is a beautiful shade of crimson, deliciously fragrant, a constant and most prolific bloomer.

Augustine Guinoisseau. (White La France)-The flowers are extra large, very full and finely formed and of delightful fragrance. A remarkably free bloomer and a Rose that no lover of Roses should miss.

Gruss an Teplitz-One of the brightest colored Roses grown. Color dark rich crimson, changing to bright scarlet, shading to velvety red. Blooms continually; flowers good sized and delightfully fragrant.

Liberty-Color pure crimson scarlet; a steady and constant bloomer; flowers of large size, beautiful elongated form. A remarkable keeper when cut, preserving its brilliancy of color without change.

Duchess of Albany--A sport from the well known La France. While it resembles its parent in several respects, it is quite distinct in color, being of a deep, rich, even tint, and the shape is more finished, being equally as vigorous, free blooming and fragrant.
Helen Gould (new)-Free growing and vigorous for its class. It is remarkably constant in blooming, every new shoot producing a flower. The blooms are bright rosy carminered, the buds are well formed, the fragrance is delightful, and taken altogether, it is a variety that should be generally planted.

Bridesmaid-Of American origin, a "sport" from C. Mermet, and possessing all the good qualities of the parent variety. It surpasses it in color, being a deep, brilliant pink and constant in color under all conditions.

The Bride-A pure white Rose of large size and most perfect form. It has delicious Tea fragrance, a strong growing, freeblooming sort.

Marie Guillot-One of the standard varieties of Tea Roses, which as yet has not been equalled by any rose of its color; splendid for any use. Especially desirable for summer Rose beds; color, pure white, sometimes tinted pale yellow.

## TRAILING ROSES.

Manda's Triumph-Double white. Pink Roamer-Pink.
South Orange Perfection-Blush.
Universal Favorite-Double rose.
Wichuriana-White.

## LORD PENZANCE'S HYBRID SWEET BRIARS.

These lovely hybrids are crosses between the Common Sweet Briar and various garden roses. Like their parent, the Common Sweet Briar, the foliage is deliciously scented. The flowers are of the most beautiful tints and produced in great profusion. They are perfectly hardy and very robust growth.

Anne of Geierstein - Dark crimson, blanching habit.

Brenda-Maiden's Blush or Peach, dainty in color and shade.

Green Mantle-Bright, rich pink, with band of white.

Meg Merrilees-Gorgeous crimson, very free flowering, seeds abundantly.

Rose Bradwardine - Beautiful clear rose, perfect shape; very profuse, strong.

## ROSA RUGOSA.

Alba-A splendid white variety; highly scented.

Rubra - Bright rosy crimson; flowers succeeded by red berries; a very handsome shrub.

## Evergreens <br> (©®niferae.)

These trees have all been transplanted two or three times, are handsome selected trees, well branched and rooted, suitable for lawns, etc., etc.

Evergreens can be most successfully transplanted a short time before they are ready to start into growth in the spring. They can also be planted safely very early in the fall. The soil to receive them should be mellow and fine, and great care taken that it is well packed about the roots after they have been well spread out in a natural position.

Norway Spruce (Abies Excelsia)-Rapid in growth, gracefully drooping in habit, dense in structure, regular in outline and perfectly hardy.

White Spruce (Abies Alba) - Of compact, pyramidal form, and greater symmetry than that of the Norway Spruce, but possibly of less vigorous growth; elegant silvery foliage.


Colorado Blue Spruce (Abies Pungens) - Of pyramidal form and compact growth, somewhat similar to the White Spruce, but with foliage of a rich steel blue color.


Colorado Blue Spruce.

Hemlock Spruce (Abies Canadensis) - A native species of undoubted worth and beauty. Entirely hardy, with drooping branches and dense habit.

Austrian Pine (Pinus Aus-triaca)-From Central Europe, leaves or needles stiff and dark green. Hardy everywhere and one of the most valuable conifers for wind-breaks, belts, etc. See illustration on following page.

Scotch Pine (Pinus Sylvestris) - A rapid grower, very hardy, from the central portion of Europe, with short, rigid, light green leaves. Very valuable for screens and for masses.

White Pine (Pinus Stro-bus)-An old and well-known native tree, of rapid growth and entirely hardy.

## Dwarf Mountain Pine

 (Pinus Mugho)-Very distinct, leaves short, stiff, a little twisted and thickly distributed over the branches; does not grow tall, but spreads over the ground, generally assuming a globular form; very dense.Red Cedar (Juniperus Virginica) - One of the most valuable trees for screens and windbreaks, perfectly hardy; too well known to need description.

Our trees are all extra well shaped and have been several times transplanted.

Irish Juniper (Juniperus Hibernica)-One of the most popular Junipers known. Rigidly upright and formal in character, resembling a green column.

American Arborvitae (Thuja Occidentalis)-A wellknown native species of great value. It forms an upright, conical tree of only medium size, and is especially valuable for screens and hedges.

Siberian Arborvitae (Thuia Siberica)Similar to American, with heavier and fuller foliage and more upright in habit. Is valuable for hedging and single specimens.


Globe Arborvitae (Thuja Glolusa,j Forms dense, low globe, handsome shade of green.

Rosedale Hybrid (New) - A cross between Arborvitae and Retinospora; it is a beautiful tree and we think will make a valuable Evergreen for this latitude.


Austrian Pine.

## Select Tardy Derennials.

Although popularly known as old fashioned plants, perennials have never been so popular as they are at the present time, and we feel safe in saying that a permanent taste has been developed which is certain to continue and make perennials as popular in the United States as they have been in the horticultural centres of Euiope for many years.

Cultivation is of the simplest, beginning with any good soil for a foundation, which may be enriched with any good fertilizer, such as well decomposed cow manure or bone meal, deeply dug, well pulverized, in season as early as possibie so as to enable them to become well rooted and established before hot, dry weather sets in, keeping the ground well stirred, and where it is not convenient to water beds during hot, dry weather, a mulch of any loose material,
which will keep the soil from baking, will be found very beneficial. Short grass, the rakings of the lawn after cutting, will be as good for this purpose as anything.

A covering of manure should be applied in the fall; this may be forked into the soil early in the spring, and, beyond this, little care need be given, the occasional staking of a plant, the cutting off of decaying flowers, which will prolong the flowering season of many species, and the dividing and replanting occasionally of such varieties that have become too large, being all that is needed.

The following list has been made with special pains as to worthy varieties, large range of colors and different styles of growth. We shall endeavor to add yearly to our list any varieties that we think worthy and discard such as we think undesirable.

For such of our customers who are not acquainted with the different varieties we offer collections of our own selection in lots of $12,25,50$ or 100 distinct species, that will keep the garden gay with flowers from the time frost leaves the ground until late in the autumn.


Achillea.-(The Pearl.)

ACHILLEA.-Milfoil or Yarrow.
Ptarmica Fl. Pl. "The Pearl'' - Flowers borne in the greatest profusion the entire summer on strong, erect stems of the purest white; as a summer cut bloom it is a great acquisition.

## ANTHEMIS. <br> Hardy Golden Marguerite.

These hardy Marguerites are among the most satisfactory sum-mer-flowering perennials, succeeding in the poorest soil and blooming continuously during the entire summer.

Tinctoria - Of dense, bush habit, with large, golden yellow flowers.

## ANTHERICUM.

Liliastrum (St. Bruno's Lily) A beautiful plant, with narrow, grass like foliage, and long spikes of white, fragrant, lily-like flowers

Liliago (St. Bernard's Lily) A pretty species, bearing spikes of white flowers.

## ANEMONE. - Windflower.

Pennsylvanica (Pennsylvanian Wind-flower) - The prettiest of our native Wind-flowers, producing its large white flowers,
which are slightly tinged with rose on the reverse side, in the greatest profusion from June to August; an excellent plant either for the border or rockery, and succeeds equally well in sun or shade.

## AQUILEGIA.-Columbine.

The Columbines are old favorites that succeed in any ordinary garden soil. The varieties offered are a selection of the best kinds.

Chrysantha - The beautiful goldenspurred "Columbine." Flowers golden yellow; blooms in the early spring; 3 feet.

Chrysantha Alba-A pretty white flowered form of the above.

Coerulea-This is the true blue form of Rocky Mountain Columbine, one of the handsomest of the family.

## ASTERS.-Hardy. <br> Michaelmas Daisies or Star Worts.

These are among the showiest of our lateflowering hardy plants, giving a wealth of bloom at a season when most other hardy flowers are past. The collection offered below is made up of the choicest varieties, only the weedy sorts being eliminated.


Anthemis.

Amethystinus - Lovely amethyst-blue flowers; 3 feet.

Robert Parker-Large sprays of beautiful lavender-blue flowers, with yellow centre.

## BOLTONIA.-False Chamomile.

Among the showiest of our native hardy perennial plants, attaining a height of 4 to 5 feet, with large single Aster-like flowers. The plant is in bloom during the summer and autumn months, and with its hundreds of flowers open at one time produces a very showy effect.

Latisquama--Pink, slightly tinged with lavendér.


Campanula Pyramidalis.

## CAMPANULA-Bell Flower.

The Bell Flowers are among the most important of the hardy plants, combining a wide range of habit and color with perfect hardiness.

Grossekii-One of the prettiest of the Canterbury Bells, of erect habit, with dark, blue flowers.

Persicifolia Alba-Identical with the above, but with single white flowers, very pretty and free-flowering.

Pyramidalis (The Chimney Bell Flower)The most conspicuous of all Campanulas, and an attractive plant for the herbaceous border, forming a perfect pyramid 4 to 5 feet high, crowded with large salver-like blue flowers.

## CARYOPTERIS.

Mastacanthus (Blue Spiraea)-A handsome, hardy perennial plant recently intro ${ }^{-}$ duced from China. It is of a vigorous growth, producing flowers in great profusion the whole length of its branches, even young plants in small pots flowering freely. The color is of rich lavender or sky blue. A valuable plant either for bedding or pot culture, blooming continuously from midsummer until cut by frost in the fall.


Caryopteris Mastacanthus.

## COREOPSIS.

Lanceolata Grandiflora-This handsome perennial is now probably the most popular perennial plant in cultivation. It begins to flower early in June and continues in flower until cut down by severe freezing weather; it is continually one mass of golden-yellow. The flowers, which are of graceful form, are invaluable for cutting for decorative purposes; it is easily grown, is perfectly hardy and succeeds in almost any position, and after once planted takes care of itself.


DELPHINIUMS.-Hardy Larkspur.
The hardy Larkspurs are one of the most important and most satisfactory plants in the herbaceous garden, and should be planted extensively even in the smallest garden. Their long spikes of flowers are produced continuously from June untillate in the fall, if the precaution is taken to remove the flower stems before they can produce seed.

Chinensis-A very pretty and effective variety, growing about is inches high, with large, open panicles of handsome flowers, varying in color through all the lighter shades of blue to almost white; should be in every collection.

Formosum-Probably the best known and most popular of the Larkspurs, producing long spikes of deep blue flowers with white eye; one of the best.

Belladonna-Cannot be recommended too highly on account of its large, lovely, sky-blue flowers, which are heightened in richness by a distinct silvery sheen; remarkable free-flowering; beginning in May it continues a mass of bloom until late in fall.

## DICTAMNUS.-Gas Plant.

A very showy border perennial, forming a bush about $1 \frac{1}{2}$ feet in height, having fragrant foliage and spikes of curious flowers, giving off during hot weather a fragrant volatile oil, which ignites when a match is applied to it.

Fraxinella-Showy, rosy-pink flowers, with deeper veins.

Alba-Pure white.

## DIELYTRA OR DICENTRA.

Spectabilis (Bleeding Heart or Seal Flower) - Adapted for out-door planting, doing splendidly in semi-shaded positions or for forcing for early spring blooming. It bears long racemes of graceful, heart-shaped pink flowers.

## EUPATORIUM.

Coelestinum - A pretty, hardy plant, with light blue flowers similar to the Ageratum; begins to flower in July and continues until frost; a most desirable and showy plant, and a color that is always scarce.

## FUNKIA - Plantain Lily.

Coerulea-Blue, broad green leaves.
Alba-Pure white, lily-shaped, fragrant flowers; borne in large clusters.


Dictamnus.

## GAILLARDIA.

Grandifiora-Gaillardias are among the showiest and most effective of hardy perennial plants; beginning to flower in June, they continue one mass of bloom the entire season; they will thrive in almost any position or in any soil, but respond freely to liberal feeding; being perfectly hardy they require absolutely no protection, taking care of themselves. The flowers are large, from $2 \frac{1}{2}$ tc $3 \frac{1}{2}$ inches in diameter; they are produced on long stems, and are excellent for cutting, and of the most gorgeous coloring. The centre is dark red brown, while the petals are variously marked with rings of brilliant scarlet crimson, orange and vermilion, and often a combination of all these colors in one flower.

## GERANIUM.-Crane's Bill.

Sanguineum - A desirable plant either for the rockery or border, with pretty cut foliage, forming a compact bush with bright crimson-purple flowers and continues in bloom from early in the summer until late in the autumn.

## GEUM.

Coccineum-A pretty border plant, growing about 2 feet high and producing large, dazzling, intense scarlet flowers during most of the summer and fall months.

## HELIOPSIS. - Orange Sun= flower.

Similar in general habit to Helianthus, but commencing to flower earlier in the season; of dwarfer habit, rarely exceeding 3 feet in height; very valuable for cutting.

Pitcherianus - A desirable, hardy herbaceous plant, growing from 2 to 3 feet high and a perpetual bloomer, beginning to flower early in the season and continuing in bloom the entire summer. The flowers are of a beautiful deep golden-yellow color, about 2 inches in diameter, of very thick texture, and are very graceful for cutting.

## GRASSES.-Hardy Ornamental.

For single specimens, beds or groups on the lawn, nothing gives a finer effect than these; they are now largely used in prominent positions in many of the public parks, etc.


Arundo Donax-Will grow from $\mathrm{I}_{5}$ to 20 feet in this climate; must be covered in winter with light manure or old hay, enough to keep frost out; poles should be cut before covering in fall. Beautiful for a center in large group of ornamental grasses or hiding unsightly objects; will multiply yearly by sending up new canes.
A. D. Variegata-A beautiful variegated form of the above. Foliage creamy-white and green; growing 6 to 8 feet high.


Grasses.


Eulalia Japonica Variegata - A very graceful, tall variety from Japan. Its long, narrow leaf-blades are striped green, white and often pink or yellow. It throws up stalks from 4 to 6 feet in height, terminated with a cluster of flower spikes.

Eulalia Japonica Zebrina (Zebra Grass) - The long blades of this variety are marked with broad, yellow bands across the leaf. It makes a very attractive specimen plant for the lawn.

Phalaris Arundinacea Variegata ( $\mathrm{Va}-$ riegated Ribbon Grass, or Gardener's Garter)Large variegated foliage; an excellent grass for bordering large beds.

## BAMBOOS.

These are being used more extensively each season. Whether planted as single specimens or in clumps on the lawn, used in sub-tropical gardening or grouped with ornamental grasses, they are always pleasing; planted on the edges of ponds, in connection with aquatic gardening, they are of special value, giving a graceful effect that can not be obtained with any other class of plants. All the varieties listed are hardy.

Aurea-A distinct and beautiful species; grows 12 feet high, with straight yellowish stems and light green foliage.
Daimio-A distinct dwarf sort; 2 feet high, with dark shining green foliage.

Metake-A handsome evergreen species; 6 to io feet high; large deep green foliage.

Viride Glaucescens-One of the best; very graceful; stems yellow, foliage bluegreen.

## HELIANTHUS.-Hardy Sunflowers.

The perennial Sunflowers are among the most effective hardy plants for large borders, for planting among shrubbery, or as clumps on the lawn. They are remarkably free flowering, will succeed in any soil, and are invaluable for decorative purposes as cut flowers during the summer.

Maximilliana-A most graceful singleflowered variety, growing from 5 to 7 feet high, continuing in bloom very late in the season. The flowers are produced in long, graceful sprays, which make it invaluable for cutting purposes.

## HEMEROCALLIS.-Day Lily.

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

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

## HOLLYHOCKS.-Superb Double.

Few hardy plants combine as many good qualities as the Hollyhock. For planting in rows or groups on the lawn, or for interspersing among shrubbery, they are invaluable. The flowers form perfect rosettes of the most lovely shades of yellow, crimson, rose, pink, orange, white, etc. The Holllyhock requires a rich, deep soil, well drained and will repay in quantity and elegance of bloom any extra care. A slight protection during the winter will be beneficial.

We offer extra strong one year old clumps that are certain to produce grand spikes of flowers this season in the following colors: White, Pink, Salmon, Yellow, Maroon, and Bright Red.

## HIBISCUS.-Mallow.

A desirable border plant with large foliage and large showy flowers of delicate coloring produced during the entire summer.

Moschuetos (Crimson Eye) - Flowers of immense size, often measuring twenty inches in circumference. The color is of the purest white, with a large spot of deep velvet crimson in the centre.

Moschuetos (Swamp Rose Mal-low)-Flowers 6 inches in diameter, of a light rosy-red color with darker eye.

## LYSIMACHIA.

Clethroides (Loose-Strife) - A fine, hardy variety, growing about 2 feet high, with long, dense, recurved spikes of pure white flowers.

## LYCHNIS.

Chalcedonica Fl. Pl. (Jerusalem Cross)-A fine perennial, producing immense heads of vermillion scarlet flowers, far exceeding in brilliancy many of the brightest Geraniums. A gem for cutting, and one of the showiest border plants.

Semperflorens Plenissima-This pretty variety begins to flower early in the spring, and continues throughout the entire summer. The flower is a beautiful, tender rose color, and is produced in long, bushy spikes.


> Hibiscus.-(Crimson Eye.)

Vespertina, Double White-Large, double white flowers, which are produced in the greatest profusion during the entire summer; taking the place of the Carnation at a season when double white flowers are scarce.

Splendens, Double Red (Ragged Robin) Forms a dense tuft of evergreen foliage, and in June it sends up tall spikes of handsome double, deep-red flowers of a most exquisite fragrance, and remains in perfection from a month to six weeks.

## JAPANESE IRIS.-Iris Kaempferii.

These magnificent Iris are among the most beautiful of our summer-flowering plants, and are destined to become more popular every season. They commence blooming about the middle of June and continue in bloom for five or six weeks. Many of these flowers measure from io to 12 inches in diameter, and rival the orchids in their rich colorings and markings. While the Iris succeeds in almost any soil, and under any conditions, they delight in a rich, deep, wet position, and should be abundantly supplied with manure and water.

Akebono - Rich, velvety purple, centre marked with golden yellow, six petals.

Fujiyama-Six petals of a light violet, beautifully mottled with white, golden yellow centre.

Hano-no-mishiki-Three large rounded petals of a beautiful mauve, which is intensified and heightened by being freely traced and veined with white.


Lychnis Splendens, Double Red.


Iris Kaempferii.
Iso-no-nami-Ground color of the three larger petals silvery-white, delicately veined and traced with violet, with golden-rayed centre, the three minor petals deep purple, edged with white, while the standards are violet, edged with white.
Kumoma-no-sora (Sky Amidst the Cloud) -The flower consists of three large, broad petals, ground color pure silvery-white, suffused in the most delicate manner with soft light-sky blue; yellow-rayed centre.
Kimbarin-Rich plum, the nearest approach to a crimson, with a golden bar in the centre of each of the six large petals.
Kumo-isho-Rich crimson purple, with light centre and white veins; a fine large three-petaled variety.
Yomo-no-umi (Boundless Sea) - Finest white, with six large petals, golden-starry centre; very choice.
Yoshino-Six petals of a bright magenta, shaded purple, with pure white veins and yellow centre.

Yuki-botan-Lively violet-blue, prettily veined with white, with a golden centre to the base of each of the six petals.

## GERMAN IRIS (or Fleur de Lis.)

I. Aurea-Clear golden yellow; fine.
I. Bougere-Lilac and velvety purple; distinct; IS inches.
I. Celeste-Delicate light lavender blue.
I. Common Purple-Purple; one of the best.
I. Eugene Sue-Creamy white, with purple spots and stripes; i8 inches. June.
I. Falcata-Yellow, tinged with purple and purple stripes; 2 feet. June.
I. Florentina-White, tinged with blue and yellow; 2 feet. May.
I. Hector-Light bronze, stained with purple. Fine.
I. Jacquesiano - Deep maroon velvet, tinged with bronze and crimson; a rare and remarkable color; 2 feet. June.
I. Jordain-Deep purple, shaded with rose.
I. L'Avenir - Lavender, a beautiful shade.
I. Lemon-White, spotted with purple, and deep purple stripes; fine; 2 feet.
I. Liabaud-Yellow and maroon; fine.
I. Louis Van Houtte-Salmon, tinged and striped with purple; 2 feet. June.
I. Madame Chereau - Clear white, handsomely feathered and bordered with blue; undulated edge.
I. Pancrea-Buff and purple; distinct; fine.
I. Pumila-Bluish purple ; first to flower; 3 to 6 inches. April and May.
I. Sampson-Rich golden yellow; crimson maroon veined with white; fine.
I. Sappho-Clear blue and indigo, beautifully blended.
I. Silver King-Flowers silvery white; distinct and fine.


German Iris (Germanica.)

## PAEONIAS. - Herbaceous.

Are among the most showy and useful of hardy plants, they are all hardy and admirably adapted to the climate of our most Northern States, growing well in almost any situation or soil. We offer a splendid assortment.
Chrysanthemiflora - White with yellow centre.
Duchess of Orleans--Silvery rose.

Festiva Alba-Pure white.
Gen. Cavaignac-Rose, salmon centre.
Louis Van Houtte-Purplishcrimson.
Mme. Chaumay-Satiny rose.
Rubens-Deep rose.
Tricolor Grandiflora-Rose shaded salmon.

## PAPAVER.-Poppy.

Orientale (Oriental Poppy)—Nothing can equal these in gorgeous effect, and, whether planted singly or in masses, their large flowers, rich brilliant colors and freedom of bloom render them conspicuous in any position. We offer them in mixed colors. Strong plants.


Oriental Poppy.

## PHLOXES.-Hardy Perennial.

The Perennial Phloxes are among the most useful and desirable of our hardy herbaceous


Paeonias.
plants and should be planted largely. They succeed in any position, and can be used to advantage either as single specimens in the mixed border, or as large clumps or beds in the garden or lawn. Our collection embraces the best new and old varieties.
Bridesmaid-Pure white, with large crimson center; very free flowering.
The Pearl-A good standard white variety.
Etna-Fine salmon-scarlet, with dark crimson eye; a bright, rich color.

Pantheon-Fine deep salmon rose; very free and effective.

Peachblow-Delicate pink, with white markings, deep rose eye. A fine, large flower.

Champ's Elysee-Intensly rich purplishcrimson.

Eugene Danzenvillier-Lilac, shading white towards the edges, with large white center.

Marie Stewart-A fine pure white, with just the faintest tinge of rose near the base of the petals.

Mrs. Dora Umgeller-Very rich deep rose; a strong-growing and free-flowering variety.
Thebaide-Salmon-red, with crimson eye; very free.

Phlox Divaricata Canadensis - One of our native varieties that is but rarely met with, and which has been introduced in Europe the past few years as a novelty. A plant that is certain to meet with much favor when better known, as nothing can produce such a cheerful cormerin the garden in the very early spring; frequently beginning to


Hardy Phloxes.
bloom early in April, it continues until about the middle of June, with large, bright lilaccolored flowers, which are produced on stems about 10 inches high, in large, showy heads, and are very fragrant.
Phlox Subulata (Moss Pink) - A pretty creeping type with moss-like evergreen foliage, which in early spring is hidden beneath a mass of bloom; one of the very best plants in our collection for the rockery, and invaluable for covering graves or carpeting the ground.

## PHYSOSTEGIA.-False Dragon Head.

One of the most beautiful of our mid-sum-mer-flowering perennials, forming dense bushes 3 to 4 feet high, bearing spikes of delicate tubular flowers not unlike a gigantic heather.
Virginica-Bright but soft pink.
Alba-Pure white; very fine.

## PINKS.-Hardy Garden.

Dwarf, hardy pinks, bearing double flowers of rich colors, decided improvements on the old sorts.

Comet-Bright rosy-crimson; a fine, large flower.

Delicata-A soft, pure, pleasing, delicate rose.

Gloire de Nancy-A pure white form of the old crimson clove; very sweet-scented.

Homer-Rich rosy-red, with dark center.
Sparkler-A beautiful deep rose-pink: with carmine markings in centre.

## PLATYCODON. - Balloon Flower, or Japanese Bell Flower.

Japonicus Fl. Pl. (Double Japanese Bell Flower) - A double form of Grandiflorum with large, glossy, deep blue flowers, which average $2 \frac{1}{2}$ inches across. There are two rows of pedals in the flower, which alternate with each other, giving the flower the appearance of a ten-pointed star.

Mariesi-A valuable dwarf variety, bearing deep ،blue, bell-shaped flowers, nearly 3 inches across.


Platycodon Japonicus Fl. Pl.

## PYRETHRUM.

Hybridum Fl. Pl.-Too much cannot be said in favor of this grand hardy perennial. No class of plants gives a wider range of colors, while the form and substance of the flowers is all that could be wished; their main season of blooming is in June, but if the old flower stems are removed they will give a tair sprinkling of flowers in the autumn. The bloom is similar to that of an aster, and ranges in color from pure white and yellow and the various shades of pink and red to deep purple. The plants we offer are seedlings grown from an extra select strain.

## RUDBECKIA.-Cone Flower.

"Golden Glow"-A glorious plant, and one that should find a place in every garden. Without question the best hardy plant introduced in many years. It is of fine habit and vigorous growth, attaining a height of from 4 to 6 feet, and begins to flower early in the season, and continues until late in the fall. The flowers are produced in enormous quantities on long stems, and resemble a


## Select 冋ardy Derennials.

Although popularly known as old fashioned plants, perennials have never been so popular as they are at the present time, and we feel safe in saying that a permanent taste has been developed which is certain to continue and make perennials as popular in the United States as they have been in the horticultural centres of Europe for many years.

Cultivation is of the simplest, beginning with any good soil for a foundation, which may be enriched with any good fertilizer, such as well decomposed cow manure or bone meal, deeply dug, well pulverized, in season as early as possibie so as to enable them to become well rooted and established before hot, dry weather sets in, keeping the ground well stirred, and where it is not convenient to water beds during hot, dry weather, a mulch of any loose material,
which will keep the soil from baking, will be found very beneficial. Short grass, the rakings of the lawn after cutting, will be as good for this purpose as anything.

A covering of manure should be applied in the fall; this may be forked into the soil early in the spring, and, beyond this, little care need be given, the occasional staking of a plant, the cutting oft of decaying flowers, which will prolong the flowering season of many species, and the dividing and replanting occasionally of such varieties that have become too large, being all that is needed.

The following list has been made with special pains as to worthy varieties, large range of colors and different styles of growth. We shall endeavor to add yearly to our list any varieties that we think worthy and discard such as we think undesirable.

For such of our customers who are not acquainted with the different varieties we offer collections of our own selection in lots of $12,25,50$ or 100 distinct species, that will keep the garden gay with flowers from the time frost leaves the ground until late in the autumn.


## ACHILLEA.-Milfoil or

 Yarrow.Ptarmica Fl. Pl. 'sThe Pearl" - Flowers borne in the greatest profusion the entire summer on strong, erect stems of the purest white; as a summer cut bloom it is a great acquisition.

## ANTHEMIS. Hardy Golden Marguerite.

These hardy Marguerites are among the most satisfactory sum-mer-flowering perennials, succeeding in the poorest soil and blooming continuously during the entire summer.

Tinctoria - Of dense, bush habit, with large, golden yellow flowers.

## ANTHERICUM.

Liliastrum (St. Bruno's Lily) A beautiful plant, with narrow, grass like foliage, and long spikes of white, fragrant, lily-like flowers

Liliago (St. Bernard's Lily) A pretty species, bearing spikes of white flowers.

## ANEMONE. - Windflower.

Pennsylvanica (Pennsylvanian Wind-flower) - The prettiest of our native Wind-flowers, producing its large white flowers,
which are slightly tinged with rose on the reverse side, in the greatest profusion from June to August; an excellent plant either for the border or rockery, and succeeds equally well in sun or shade.

## AQUILEGIA.-Columbine.

The Columbines are old favorites that succeed in any ordinary garden soil. The varieties offered are a selection of the best kinds.

Chrysantha - The beautiful goldenspurred "Columbine." Flowers golden yellow; blooms in the early spring; 3 feet.

Chrysantba Alba-A pretty white flowered form of the above.

Coerulea-This is the true blue form of Rocky Mountain Columbine, one of the handsomest of the family.

## ASTERS.-Hardy.

## Michaelmas Daisies or Star Worts.

These are among the showiest of our lateflowering hardy plants, giving a wealth of bloom at a season when most other hardy flowers are past. The collection offered below is made up of the choicest varieties, only the weedy sorts being eliminated.


Anthemis.

Amethystinus - Lovely amethyst-blue flowers; 3 feet.

Robert Parker-Large sprays of beautiful lavender-blue flowers, with yellow centre.

## BOLTONIA.-False Chamomile.

Among the showiest of our native hardy perennial plants, attaining a height of 4 to 5 feet, with large single Aster-like flowers. The plant is in bloom during the summer and autumn months, and with its hundreds of flowers open at one time produces a very showy effect.

Latisquama-Pink, slightly tinged with lavender.


Campanula Pyramidalis.

## CAMPANULA-Bell Flower.

The Bell Flowers are among the most important of the hardy plants, combining a wide range of habit and color with perfect hardiness.

Grossekii-One of the prettiest of the Canterbury Bells, of erect habit, with dark, blue flowers.

Persicifolia Alba-Identical with the above, but with single white flowers, very pretty and free-flowering.

Pyramidalis (The Chimney Bell Flower)The most conspicuous of all Campanulas, and an attractive plant for the herbaceous border, forming a perfect pyramid 4 to 5 feet high, crowded with large salver-like blue flowers.

## CARYOPTERIS.

Mastacanthus (Blue Spiraea) - A handsome, hardy perennial plant recently introduced from China. It is of a vigorous growth, producing flowers in great profusion the whole length of its branches, even young plants in small pots flowering freely. The color is of rich lavender or sky blue. A valuable plant either for bedding or pot culture, blooming continuously from midsummer until cut by frost in the fall.


Caryopteris Mastacanthus.

## COREOPSIS.

Lanceolata Grandiflora-This handsome perennial is now probably the most popular perennial plant in cultivation. It begins to flower early in June and continues in flower until cut down by severe freezing weather; it is continually one mass of golden-yellow. The flowers, which are of graceful form, are invaluable for cutting for decorative purposes; it is easily grown, is perfectly hardy and succeeds in almost any position, and after once planted takes care of itself.


Coreopsis Lanceolata Grandififora.

## DELPHINIUMS.-Hardy Larkspur.

The hardy Larkspurs are one of the most important and most satisfactory plants in the herbaceous garden, and should be planted extensively even in the smallest garden. Their long spikes of flowers are produced continuously from June until late in the fall, if the precaution is taken to remove the flower stems before they can produce seed.

Chinensis-A very pretty and effective variety, growing about is inches high, with large, open panicles of handsome flowers, varying in color through all the lighter shades of blue to almost white: should be in every collection.

Formosum-Probably the best known and most popular of the Larkspurs, producing long spikes of deep blue flowers with white eye; one of the best.

Belladonna-Cannot be recommended too highly on account of its large, lovely, sky-blue flowers, which are heightened in richness by a distinctsilvery sheen; remarkable free-flowering; beginning in May it continues a mass of bloom until late in fall.

## DICTAMNUS.-Gas Plant.

A very showy border perennial, forming a bush about $\frac{1}{2}$ feet in height, having fragrant foliage and spikes of curious flowers, giving off during hot weather a fragrant volatile oil, which ignites when a match is applied to it.

Fraxinella-Showy, rosy-pink flowers, with deeper veins.

Alba-Pure white.

## DIELYTRA OR DICENTRA.

Spectabilis (Bleeding Heart or Seal Flower)-Adapted for out-door planting. doing splendidly in semi-shaded positions or for forcing for early spring blooming. It bears long racemes of graceful, heart-shaped pink flowers.

## EUPATORIUM.

Coelestinum - A pretty, hardy plant, with light blue flowers similar to the Ageratum; begins to flower in July and continues until frost; a most desirable and showy plant, and a color that is always scarce.

FUNKIA - Plantain Lily.
Coerulea-Blue, broad green leaves.
Alba-Pure white, lily-shaped, fragrant flowers; borne in large clusters.


Dictamnus.

## GAILLARDIA.

Grandifiora-Gaillardias are among the showiest and most effective of hardy perennial plants; beginning to flower in June, they continue one mass of bloom the entire season; they will thrive in almost any position or in any soil, but respond freely to liberal feeding; being perfectly hardy they require absolutely no protection, taking care of themselves. The flowers are large, from $2 \frac{1}{2}$ to $3 \frac{1}{2}$ inches in diameter; they are produced on long stems, and are excellent for cutting, and of the most gorgeous coloring. The centre is dark red brown, while the petals are variously marked with rings of brilliant scarlet crimson, orange and vermilion, and often a combination of all these colors in one flower.

## GERANIUM.-Crane's Bill.

Sanguineum - A desirable plant either for the rockery or border, with pretty cut foliage, forming a compact bush with bright crimson-purple flowers and continues in bloom from early in the summer until late in the autumn.

## GEUM.

Coccineum-A pretty border plant, growing about 2 feet high and producing large, dazzling, intense scarlet flowers during most of the summer and fall months.

## HELIOPSIS. - Orange Sun= flower.

Similar in general habit to Helianthus, but commencing to flower earlier in the season; of dwarfer habit, rarely exceeding 3 feet in height; very valuable for cutting.

Pitcherianus - A desirable, hardy herbaceous plant, growing from 2 to 3 feet high and a perpetal bloomer, beginning to flower early in the season and continuing in bloom the entire summer. The flowers are of a beautiful deep golden-yellow color, about 2 inches in diameter, of very thick texture, and are very graceful for cutting.

## GRASSES.-Hardy Ornamental.

For single specimens, beds or groups on the lawn, nothing gives a finer effect than these; they are now largely used in prominent positions in many of the public parks, etc.


Arundo Donax-Will grow from ${ }^{1} 5$ to 20 feet in this climate; must be covered in winter with light manure or old hay, enough to keep frost out; poles should be cut before covering in fall. Beautiful for a center in large group of ornamental grasses or hiding unsightly objects; will multiply yearly by sending up new canes.
A. D. Variegata-A beautiful variegated form of the above. Foliage creamy-white and green; growing 6 to 8 feet high.

A. D. Macrophylla Glauce (Giant Reed)-A remarkably strong growing variety, attaining a height of 15 feet, with foliage $3 \frac{1}{2}$ to 4 inches wide, much closer jointed than the type; the leaves are of a dark glossy-green on the upper surface, and of a glaucous color underneath. It forms denser and more majestic looking plants than A. Donax.

Erianthus Ravennae-Grows from 9 to 12 feet high, frequently throwing up from 30 to 50 flower spikes. It resembles the Pampas Grass, but blooms more abundantly.

Gynerium Argentum (Pampas Grass) One of the most effective. Its silvery plumes are produced on stems 8 to 10 feet high. Well established plants can remain in the open ground if protected.
Eulalia Gracillima Univittata - Of compact habit, with very narrow foliage; of a bright green color, with a silvery mid-rib.
Grasses.


Eulalia Japonica Variegata - A very graceful, tall variety from Japan. Its long, narrow leaf-blades are striped green, white and often pink or yellow. It throws up stalks from 4 to 6 feet in height, terminated with a cluster of flower spikes.

Eulalia Japonica Zebrina (Zebra Grass)-The long blades of this variety are marked with broad, yellow bands across the leaf. It makes a very attractive specimen plant for the lawn.

## Phalaris Arundinacea Variegata ( $\mathrm{Va}-$

 riegated Ribbon Grass, or Gardener's Garter)Large variegated foliage; an excellent grass for bordering large beds.
## BAMBOOS.

These are being used more extensively each season. Whether planted as single specimens or in clumps on the lawn, used in sub-tropical gardening or grouped with ornamental grasses, they are always pleasing; planted on the edges of ponds, in connection with aquatic gardening, they are of special value, giving a graceful effect that can not be obtained with any other class of plants. All the varieties listed are hardy.

Aurea-A distinct and beautiful species; grows 12 feet high, with straight yellowish stems and light green foliage.

Daimio-A distinct dwarf sort; 2 feet high, with dark shining green foliage.

Metake-A handsome evergreen species; 6 to io feet high; large deep green foliage.

Viride Glaucescens-One of the best; very graceful; stems yellow, foliage bluegreen.

## HELIANTHUS.-Hardy Sunflowers.

The perennial Sunflowers are among the most effective hardy plants for large borders, for planting among shrubbery, or as clumps on the lawn. They are remarkably free flowering, will succeed in any soil, and are invaluable for decorative purposes as cut flowers during the summer.

Maximilliana-A most graceful singleflowered variety, growing from 5 to 7 feet high, continuing in bloom very late in the season. The flowers are produced in long, graceful sprays, which make it invaluable for cutting purposes.

## HEMEROCALLIS. - Day Lily.

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

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

## HOLLYHOCKS.-Superb Double.

Few hardy plants combine as many good qualities as the Hollyhock. For planting in rows or groups on the lawn, or for interspersing among shrubbery, they are invaluable. The flowers form perfect rosettes of the most lovely shades of yellow, crimson, rose, pink, orange, white, etc. The Holllyhock requires a rich, deep soil, well drained and will repay in quantity and elegance of bloom any extra care. A slight protection during the winter will be beneficial.

We offer extra strong one year old clumps that are certain to produce grand spikes of flowers this season in the following colors: White, Pink, Salmon, Yellow, Maroon, and Bright Red.

## HIBISCUS.-Mallow.

A desirable border plant with large foliage and large showy flowers of delicate coloring produced during the entire summer.
Moschuetos (Crimson Eye) - Flowers of immense size, often measuring twenty inches in circumference. The color is of the purest white, with a large spot of deep velvet crimson in the centre.

Moschuetos (Sivamp Rose Mal-lowi)-Flowers 6 inches in diameter, of a light rosy-red color with darker eye.

## LYSIMACHIA.

Clethroides (Loose-Strife) -A fine, hardy variety, growing about 2 feet high, with long, dense, recurved spikes of pure white flowers.

## LYCHNIS.

Chalcedonica Fl. Pl. (Jerusalem Cross)-A fine perennial, producing immense heads of vermillion scarlet flowers, far exceeding in brilliancy many of the brightest Geraniums. A gem for cutting, and one of the showiest border plants.
Semperflorens Plenissima-This pretty variety begins to flower early in the spring, and continues throughout the entire summer. The flower is a beautiful, tender rose color, and is produced in long, bushy spikes.

Vespertina, Double White-Large, double white flowers, which are produced in the greatest profusion during the entire summer; taking the place of the Carnation at a season when double white flowers are scarce.
Splendens, Double Red (Ragged Robin) Forms a dense tuft of evergreen foliage, and in June it sends up tall spikes of handsome double, deep-red flowers of a most exquisite fragrance, and remains in perfection from a month to six weeks.

## JAPANESE IRIS.—Iris Kaempferii.

These magnificent Iris are among the most beautitul of our summer-flowering plants, and are destined to become more popular every season. They commence blooming about the middle of June and continue in bloom for five or six weeks. Many of these flowers measure from to to 12 inches in diameter, and rival the orchids in their rich colorings and markings. While the Iris succeeds in almost any soil, and under any conditions, they delight in a rich, deep, wet position, and should be abundantly supplied with manure and water.
Akebono-Rich, velvety purple, centre marked with golden yellow, six petals.
Fujiyama-Six petals of a light violet, beautifully mottled with white, golden yellow centre.

Hano-no-mishiki-Three large rounded petals of a beautiful mauve, which is intensified and heightened by being freely traced and veined with white.

Hibiscus.-(Crimson Eye.)


Lychnis Splendens, Double Red.


Iris Kaempferii.
Iso-no-nami-Ground color of the three larger petals silvery-white, delicately veined and traced with violet, with golden-rayed centre, the three minor petals deep purple, edged with white, while the standards are violet, edged with white.
Kumoma-no-sora (Sky Amidst the Cloud) -The flower consists of three large, broad petals, ground color pure silvery-white, suffused in the most delicate manner with soft light-sky blue; yellow-rayed centre.
Kimbarin-Rich plum, the nearest approach to a crimson, with a golden bar in the centre of each of the six large petals.

Kumo-isho-Rich crimson purple, with light centre and white veins; a fine large three-petaled variety.
Yomo-no-umi (Boundless Sea) - Finest white, with six large petals, golden-starry centre; very choice.

Yoshino-Six petals of a bright magenta, shaded purple, with pure white veins and yellow centre.

Yuki-botan-Lively violet-blue, prettily veined with white, with a golden centre to the base of each of the six petals.

## GERMAN IRIS (or Fleur de Lis.)

I. Aurea-Clear golden yellow; fine.
I. Bougere-Lilac and velvety purple; distinct; I8 inches.
I. Celeste-Delicate light lavender blue.
I. Common Purple-Purple; one of the best.
I. Eugene Sue-Creamy white, with purple spots and stripes; i8 inches. June.
I. Falcata-Yellow, tinged with purple and purple stripes; 2 feet. June.
I. Florentina-White, tinged with blue and yellow; 2 feet. May.
I. Hector-Light bronze, stained with purple. Fine.
I. Jacquesiano - Deep maroon velvet, tinged with bronze and crimson; a rare and remarkable color; 2 feet. June.
I. Jordain-Deep purple, shaded with rose.
I. L'Avenir - Lavender, a beautiful shade.
I. Lemon-White, spotted with purple, and deep purple stripes; fine; 2 feet.
I. Liabaud-Yellow and maroon; fine.
I. Louis Van Houtte-Salmon, tinged and striped with purple; 2 feet. June.
I. Madame Chereau - Clear white, handsomely feathered and bordered with blue; undulated edge.
I. Pancrea-Buff and purple; distinct; fine.
I. Pumila-Bluish purple; first to flower; 3 to 6 inches. April and May.
I. Sampson-Rich golden yellow; crimson maroon veined with white; fine.
I. Sappho-Clear blue and indigo, beautifully blended.
I. Silver King-Flowers silvery white; distinct and fine.


German Iris (Germanica.)

## PAEONIAS. - Herbaceous.

Are among the most showy and useful of hardy plants, they are all hardy and admirably adapted to the climate of our most Northern States, growing well in almost any situation or soil. We offer a splendid assortment.

Chrysanthemiflora - White with yellow centre.
Duchess of Orleans-Silvery rose.
Festiva Alba-Pure white.
Gen. Cavaignac-Rose, salmon centre.
Louis Van Houtte-Purplishcrimson.
Mme. Chaumay-Satiny rose.
Rubens-Deep rose.
Tricolor Grandiflora-Rose shaded salmon.

## PAPAVER.-Poppy.

Orientale (Oriental Poppy)-Nothing can equal these in gorgeous effect, and, whether planted singly or in masses, their large flowers, rich brilliant colors and freedom of bloom render them conspicuous in any position. We offer them in mixed colors. Strong plants.


Oriental Poppy.
PHLOXES.-Hardy PerenniaI.
The Perennial Phloxes are among the most useful and desirable of our hardy herbaceous


Paeonias.
plants and should be planted largely. They succeed in any position, and can be used to advantage either as single specimens in the mixed border, or as large clumps or beds in the garden or lawn. Our collection embraces the best new and old varieties.
Bridesmaid-Pure white, with large crimson center; very free flowering.
The Pearl-A good standard white variety.
Etna-Fine salmon-scarlet, with dark crimson eye; a bright, rich color.
Pantheon-Fine deep salmon rose; very free and effective.

Peachblow-Delicate pink, with white markings, deep rose eye. A fine, large flower.

Champ's Elysee-Intensly rich purplishcrimson.

Eugene Danzenvillier-Lilac, shading white towards the edges, with large white center.
Marie Stewart-A fine pure winite, with just the faintest tinge of rose near the base of the petals.
Mrs. Dora Umgeller-Very rich deep rose; a strong-growing and free-flowering variety.
Thebaide-Salmon-red, with crimson eye; very free.
Phlox Divaricata Canadensis - One of our native varieties that is but rarely met with, and which has been introduced in Europe the past few years as a novelty. A plant that is certain to meet with much favor when better known, as nothing can produce such a cheerful cornerin the garden in the very early spring; frequently beginning to


Hardy Phloxes.
bloom early in April, it continues until about the middle of June, with large, bright lilaccolored flowers, which are produced on stems about io inches high, in large, showy heads, and are very fragrant.

Phlox Subulata (Moss Pink) - A pretty creeping type with moss-like evergreen foliage, which in early spring is hidden beneath a mass of bloom; one of the very best plants in our collection for the rockery, and invaluable for covering graves or carpeting the ground.

## PHYSOSTEGIA.-False Dragon Head.

One of the most beautiful of our mid-sum-mer-flowering perennials, forming dense bushes 3 to 4 feet high, bearing spikes of delicate tubular flowers not unlike a gigantic heather.

Virginica-Bright but soft pink.
Alba-Pure white; very fine.

## PINKS.-Hardy Garden.

Dwarf, hardy pinks, bearing double flowers of rich colors, decided improvements on the old sorts.

Comet-Bright rosy-crimson; a fine, large flower.

Delicata-A soft, pure, pleasing, delicate rose.

Gloire de Nancy-A pure white form of the old crimson clove; very sweet-scented.

Homer-Rich rosy-red, with dark center.
Sparkler-A beautiful deep rose-pink: with carmine markings in centre.

## PLATYCODON.- Balloon Flower, or Japanese Bell Flower.

Japonicus Fl. Pl. (Double Japanese Bell Flower) - A double form of Grandiflorum with large, glossy, deep blue flowers, which average $2 \frac{1}{2}$ inches across. There are two rows of pedals in the flower, which alternate with each other, giving the flower the appearance of a ten-pointed star.

Mariesi-A valuable dwarf variety, bearing deep، blue, bell-shaped flowers; nearly 3 inches across.


Platycodon Japonicus Fl. Pl.

## PYRETHRUM.

Hybridum Fl. Pl.-Too much cannot be said in favor of this grand hardy perennial. No class of plants gives a wider range of colors, while the form and substance of the flowers is all that could be wished; their main season of blooming is in June, but if the old flower stems are removed they will give a fair sprinkling of flowers in the autumn. The bloom is similar to that of an aster, and ranges in color from pure white and yellow and the various shades of pink and red to deep purple. The plants we offer are seedlings grown from an extra select strain.

## RUDBECKIA.-Cone Flower.

'GGolden Glow''-A glorious plant, and one that should find a place in every garden. Without question the best hardy plant introduced in many years. It is of fine habit and vigorous growth, attaining a height of from 4 to 6 feet, and begins to flower early in the season, and continues until late in the fall. The flowers are produced in enormous quantities on long stems, and resemble a
fine double golden-yellow cactus dahlia: and as a cut flower for vases, etc., it has no equal.

## SCABIOSA.

These are among the handsomest perennials we possess and should be grown in every garden, if only for cutting purposes, for which they are admirably adapted, lasting a long time when placed in water.

Caucasica-Of a peculiarly soft and charming shade of lilacblue.

## SEDUM.-Stone Crop.

The dwarf or creeping varieties are suitable for rock-work, covering graves, dry, sunny banks and carpet bedding.

Acre (Golden Moss)-Creeping, foliage and flowers bright yellow.

## SPIRAEA. - Goat's Beard, Meadow Sweet.

S. Filipendula Fl. Pl. (Dou-ble-flowered Drop-wort) - Numerous corymbs of double white flowers and pretty'fern-like foliage.


Spiraea Palmata.


Rudbeckia Laciniata.


Spirea Fllipendula Fl. Pl.
S. Palmata (Crimson Meadow Sweet)-One of the most beautiful hardy plants in cultivation. The deep purple red of the stems and branches, passing into the crimsonpurple of the broad corymbs of flower, contrasts most exquisitely with the foliage.

## TRITOMA.-Flame Flower, or Torch Lily.

Splendid summer and fall flowering plants with stately flower scapes and magnificent dense terminal spikes of high colored flowers,


Tritoma Uvaria.
familiarly known on account of their shape and glowing colors as the "Red-hot Poker" plant.
Pfitzerii-A grand improvement on Tritoma Uvaria Grandiflora. The spikes, which are produced with considerable more freedom than in the old variety, are of gigantic size, frequently $4 \frac{1}{2}$ feet high, with heads of bloom over 12 inches long, of a rich orange-scarlet, shading to salmon-rose on the edge; a first-class acquisition.
Uvaria Grandiflora - Orange-red flowers.

## VERONICA.-Speedwell.

Most desirable hardy plants, the tall-growing sort being admirably adapted to the border, while the dwarf varieties are excellent rock plants.

Longifolia Subsessilis-A pretty species with blue flowers, produced in spikes a foot long, cuntinuing in bloom the entire summer and fall; one of the most desirable. 缕

Incana-Bright silvery foliage with spikes of amethyst-blue flowers.
Alba-A white flowered form of the above.

## YUCCA.-Adam's Needle.

Filamentosa-Among hardy ornamental foliage and flowering plants this can be classed at the head of the list. Its broad, sword-like foliage and tall branched spikes of large, fragrant, drooping, creamy-white flowers make it an effective plant for all positions.


Yucca Fillamentosa.


| Plant. | $\begin{gathered} \text { YIRST } \\ \text { APPLICATION. } \end{gathered}$ | SECOND <br> APPLICATION. | TIIIRD APPLICATION. | loURTII <br> APPLICATION. | $\begin{gathered} \text { HIFTH } \\ \text { APPLICATION. } \end{gathered}$ | REMARKS. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Apple-Scab, bitter rot, biting insects. | When buds begin to swell, Bordeaux. | Just betore flowers open, Bordeaux. | As last flowers are falling, Bordeaux and ar. senites. | Io to 12 days later Bordeaux and arsenites. | ro to 15 days later Bordeaux. | If bitter rot appears, am. copper carbonate or potassium sulphide every ten days until fruit is picked. |
| Cabbage - Womms, aphis, Harlequin bug. | When insects are first seen, kerosene emulsion. | 10 days later repeat if not heading. | o days later hot water, 30 deg. if heading. | Repeat third when necessary. |  | Plant catch rows of radish or mustard, and spray with strong kerosene emulsion as insects gather. |
| Currant, Goose= berry-Mildew worms, aplis. | When leaves appear, Bordeaux. | Io days later, Bordeaux.Hellebore for worms quassia and tobacco for aphis. | Repeat second when necessary. | Ammoniacal copper carbonate after fruit is one half grown. |  |  |
| $\begin{aligned} & \text { Evergreens-Bag } \\ & \text { Worms. } \end{aligned}$ | When bag worms first appear, arsenites (I lb. to 300 gals.) | Repeat first if necessary. | If worms persist until wood is ripe andweather is dry add more arsenites. |  |  | Pick bags containing eggs in winter. To tell when worms hatch, hang bags containing eggs in bottle in conspicuous place, with bits of colored cloth. |
| Grape-Fungous, diseases, biting insects. | When buds begin to swell, Bordeaux. | Before flowers open, Bordeaux and arsenites. | When flowers have fallen repeat second. | 10 to 14 days later Bordeaux. | If rot appears after fruit is half grown, am. copper carbonate. | Sacking bunches in manilla sacks gives finer specimens for show table. |
| Nursery Stock Fungous diseases, Bayworm and May beetle. | When buds begin to swell, Bordeaux. | When leaves appear, Bordeaux and arsenites. | r4 days later repeat second. | 14 days later repeat second. | 14 days later repeat second. | Cut out and burn fire blight if it appears. |
| Peach, Nectarine, Apricot-Hungous diseases. | When buds begin to swell, Bordeatix. | Just before flowers open, Bordeaux. | When flowers have fallen, Bordeaux.Arsenites may be added for curculio. | io days later repeat third. | Am. copper carbonate every 10 days for rot after peaches are nearly grown. | Jar trees for curculio during early morning or evening after fruit sets. |
| Pear-Leaf blight, scab, biting insects. | When buds begin to swell, Bordeaux. | Just before flowers open, Bordeaux. | When flowers have fallen, Bordeaux and arsenites. | io to 12 days later repeat third. | io to 15 days later Bordeaux. | Cut out and burn fire blight if it appears. |
| Plum-Fungous diseases, curculio. | When buds begin to swèl, Bordeaux. | Just before flowers open, Bordeaux and arsenites. | When flowers have fallen, Bordeaux and arsenites. | io to i4 days later repeat third. | 12 to 15 days later repeat third. | Jar tree for curculio morning or evening after fruit sets. Ain. copper carbouate solution every week from the time the fruit reaches full size until gathered. |
| Potato-Scab blight, beetles. | Soak seed for scab in corrosive sublimate solution, 2 oz . to 16 gals. water for $1 / 2 \mathrm{hrs}$. | When beetles appear, arsenites. | When vines are oue half grown, Bordeallx. Arsenites for beetles. | so to 14 days 1ater repeat third. | o to 14 days later repeat third. |  |

rot appears at time of ripenrot appears attime spray with am. copper and destroy all decayed fruit
yray frequently with Bordeaux for fungous diseases
that appear after fruit is gathered.
adoor roses may be treated with kerosene emulsion
(very dilute) for aphis. Tobacco smoke may be used Before fruit ripens When last fruit is Repeat fourth, if Young plants not in bearing may be treated throughout
the season.

| When fruit has set, Bordeaux and arsenites. | 'Two weeks later, Bordeaux. | Two weeks later repeat third. | Two weeks later repeat third. |
| :---: | :---: | :---: | :---: |
| When leaves are opening, Bordeaux. Cut out all rusted canes that appear. | Two weeks later, (when not in flower), repeat second. | Before fruit is full size, am. copper carbonate solution. | After fruiting, Bordeaux. |
| $\begin{aligned} & \text { If slugs appear, } \\ & \text { Hellebore. } \end{aligned}$ | If fungi appear, repeat first. For slugs repeat second. | . |  |
| When first fruit sets,' repeat first. | Before fruit tipens am. copper carbonate. $\qquad$ | When last fruit is harvested, Bordeaux. | Repeat fourth, if necessary. |
| Repeat first every two weeks, if necessary. |  |  | - |


| Quince - Fungous diseases, biting insects. | When buds begin to swell. Bordeaux. |
| :---: | :---: |
| Raspberry, Black= berry, DewberryFungous disenses. | When buds begin to swell, Bordeaux. |
| Rose-Fungous diseases, slugs. | When leaves appear, am. copper carbonate. |
| Strawberry-Rust. | When flowers first <br> begin to open, Bordeaux. |
| Tomato-Rot, blight. | At first appearance of fungous disease, Bordeaux. |

 FORMULAS. Ammoniacal Copper Carbonate,

## Kerosene Emulsion.

 Dissolve the soap in the water, add the kero-
sene and churn with a pump for to minutes Dilute with io gallons of water before applying. Use strong emulsion for all scale insects bugs, red spider, thrips, bark lice, or scale,
cabbage worms, currant worms, and all insects which have soft bodies, can also be successfully treated.

## Potassium Sulphide Solution,

 Dissolve the potassium sulphide in the water.
For bitter rot of apples and for currant and For bitter rot of apples and for currant and
gooseberry'mildew.
Quassia and Tobacco Solution.


 over night. The next morning boil the quassia
for 15 minutes in the water in which it has been
 For plant lice. It has, with us, given best sat
isfaction for plum aphis. isfaction for plum aphis Dissolve the copper sulphate by putting it in a ack and suspending it over a tub of water rat
east ouches the water. When it is dissolved, dilute
 add water to make 50 galons.
dilute both lime and copper sulphate before
they go together, or chemical action will injure The Bordeaux Mixture is used for most fun-
 sprayed with it near the time of ripening.

 Apply when thoroughly mixed. This poison
is not so energetic as the arsenites and may be
 mest remedy for rose slugs.

> Hellebore. Bordeaux Mixtures. Copper sulphate.

## Copper carbonate...................... 6 ounces.

water............................. 40 to 50 gallons.
 grader fungous diseases. It does not discolor
 ripening. Often used for apple bitter rot. -sən!uas.」V
Paris green or London purple......... I pound.
Fresh lime Water............................... 175 gallons purple with a little water, gradually dilute it
by adding more water. When it is of liquid consistency, pour it into the water. If the poison is put dry into a barrel of water, it will into the water. liable to burn foliage, so it is sometimes premore readily kept in suspension in the water, however. In applying either of these poisons,
the liquid should be kept stirred so they will not settle. deaus mixture instead of water

## INDEX.

| Apple | $\begin{gathered} \text { Page. } \\ 6-\mathrm{II} \end{gathered}$ |
| :---: | :---: |
| Apricot. | 22 |
| Almond | 23 \& 37 |
| Asparagus. | 34 |
| Acer.... | 37 |
| Aesculus | 37 |
| Alnus.. | 37 |
| Alder | 37 |
| Amalanchier | 37 |
| Amygdalus. | 37 |
| Aralia | 37 |
| Ash | 38 \& 40 |
| Althaea | 42 |
| Ampelopsis | 49 |
| Aristolochia | 49 |
| Arborvitae | 57 |
| Achillea. | 59 |
| Anthemis | 59 |
| Anthericum. | 59 |
| Anemone. | 59 |
| Aquilegia | 59 |
| Asters | 59-60 |
| Arundo Donax | 62 |
| Blackberries | 24-25 |
| Betula | 7 \& 41 |
| Birch. | 7 \& 41 |
| Berberis | 42 |
| Bladder Senna | 44 |
| Bush Ciover. | 5 \& 46 |
| Boltonia. . | 60 |
| Bell Flower | 60 |
| Blue Spirea. | 60 |
| Bleeding Heart | 6 I |
| Bamboos | 63 |
| Balloon Flower | 67 |
| Cherry. | 19 \& 38 |
| Chestnuts | 3 \& 37 |
| Corylus. |  |
| Currants. | 8 \& 46 |
| Catalpa. |  |
| Cerasus. | 38 |
| Cercis. | 38 |
| Cornus | 5 \& 43 |
| Cytisus | 38 |
| Crab. | $1 \mathbb{E}^{4} 40$ |
| Cypress | 40 |
| Camperdown Elm | 40 |
| Calycauthus.... | 43 |
| Ceanothus.. | 43 |
| Chionanthus | 43 |
| Clethra.. | 43 |
| Cotoneaster | 43 |
| Cornel. | 43 |
| Coronilla | 43 |
| Cydonia. | 44 |
| Colutea | 44 |
| Corchorus. | 45 |
| Cinquifoil. | 46 |
| Clematis. | 49 |
| cedar. | 57 |
| Columbine | 59 |
| Campanula | 60 |
| Caryopteris. | 60 |


| Coreopsis | Page. $60 \& 6 \mathrm{I}$ |
| :---: | :---: |
| Cranes Bill |  |
| Dogwood....... | 38 \& 43 |
| Deciduous Trees | 37-40 |
| Deutzia |  |
| Diervilla | 48 |
| Ditchman's Pipe | 49 |
| Daisies | 59 |
| Delphiniums | 61 |
| Dictamnus. | 61 |
| Dielytra | 61 |
| Dicentra. | \% |
| Day Lily. | 63 |
| Euonymus | 38 |
| Elm. | 40 \& 4I |
| Eleagnus | 44 \& 45 |
| Exochorda | 45 |
| Elder. | 7 |
| Evergreens.. | 56-58 |
| Eupatorium |  |
| Erianthus | 62 |
| Eulalia | 62 |
| Filberts. | 23 \& 43 |
| Fraxinus | 38 |
| Fringe Tree. | 43 |
| Forsythia. | 45 |
| Funkia. | 61 |
| Flame Flower | 68 |
| Cooseberry | 27 |
| Grapes | 29-30 |
| Golden Chain | 38 |
| Gymnocladus | 38 |
| Golden Bell.. | 45 |
| Globe Flower | 45 |
| Golden Marguerite | 59 |
| Gas Plant. | 61 |
| Gaillardia. | 61 |
| Geranium | 62 |
| Geum. | 62 |
| Grasses | 62 \& 63 |
| Gynerium | 2 \& 63 |
| Golden Glow |  |
| Halesia. | 38 |
| Hoptree. | 40 |
| Hibiscus | 2 \& 63 |
| Hazel.. |  |
| Hydrangea | 45 |
| Hypericum | 45 |
| Honeysuckle |  |
| Hedge Plants | 50 |
| Hardy Perennials. | 58-69 |
| Hardy Larkspur. | 61 |
| Heliopsis | 62 |
| Helianthus | 63 |
| Hemerocallis | 63 |
| Holly hocks. | 63 |
| Ivy | 50 |
| Irish Juniper | 57 |
| Iris Japan. | d 65 |
| Iris German | 65 |
| Japan Quince |  |
| Kentucky Coffee. | 38 |
| Kœlreuteria | 38 |

## Page.

Kerria........................45 \& 46
Laburnum ................... 38
Larix.......................... 39
Larch........................ 39
Leriodendron............... 39
Liquidamber............... 39
Linden ....................... 40
Lespedeza...................... 45 \& 46
Ligustrum ..... .............. 46 \& 50
Lilac ........................... 48
Lysimachia ............... 64
Lychnis..................... 64
M ulberry ..................... 22 \& 4 I
Maple........................ 37
Magnolia.................... 39
Mountain Ash............. 40
Maiden Hair............... 40
Mock Orange............... 46
Meadow Sweet............... 45 \& 46
Milfoi1......................... 59
Nuts............................ 23
New Jersey Tea........... 43
Ornamental Shrubs...... 42--49
Osage Orange.............. 50
Peach.......................I-15 \& 39
Pear.......... ............. 15-18
Plum...................... 19-21 \& 39
Persica...................... 39
Platanus..................... 39
Plane....................... 39
Poplar...................... 39
Populus..................... 39
Pruniss ....................... 39
Pyrus....................... 40
Ptelia......................... 40
Pear1 Bush................ 45
Philadelphus.............. 46
Potentilla................... 46
Privet........................ 46 \& 50
Pines......................... 57
Plantain Lily...... ....... 61
Phalaris .... ............... $6_{3}$
Pæonias..................... 66
Papaver.................... 66
Poppy......................... 66
Phlox........................ 66 \& 67
Physostegia................ 67
Pinks........................ 67
Platycodon.................. 67
Pyrethrum................. 67
Purple Fringe............. 47
Quince.......................... ${ }^{21}$
Raspberries.................. 25 \& 26
Rhubarb.................... 34
Red Bud..................... 38
Rose of Sharon.......... 42
Rhodotypus................ 46
Ribes........................ 46
Rhus ....................... 47
Roses ...................... 5r-56
Red Cedar.................. 57
Rosedale Hybrid.......... 57
Rudbeckia................ 67

## INDEX.-CONCLUDED.




PAUL NEYRON.



[^0]:    屈 Our Annual Price List for Stock described in this Catalogue will be mailed on Application.

[^1]:    Hydrangea Paniculata Grandiflora.

