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GLEN BROTHERS Inc

EST. 1866, INC. 1907

GLENWOOD NURSERY
ROCHESTER, N.Y.

RADIANCE

1917

BUSINESS TERMS

CORRESPONDENCE. Our office facilities are of the best and all inquiries will receive prompt and intelligent attention.

LANDSCAPE DEPARTMENT. We cheerfully submit sketches on approval, and follow up an acceptance with complete planting plans. In working up small places, we need only the measurements and such photographs as will show the surroundings. For larger operations, we send an expert to look the places over, get an idea of the possibilities, and thus are able to propose the best available plan. We arrange, when desired, to superintend the planting, so that operations of some extent are carried on successfully with the least bother to those who entrust their commissions to us. We solicit correspondence upon this subject and offer our facilities, of proved excellence, with confidence.

ILLUSTRATIONS. The engravings in this catalogue have been prepared for us and are made from photographs of objects on our own grounds and about Rochester.

PRICES in this Catalogue are F. O. B. Rochester, N. Y. There are no charges for packing or boxing. All goods are delivered at freight and express depots free of charge. On foreign shipments which require special preparation, a charge to cover this will be made, but only the actual outlay.

DIRECTIONS FOR SHIPPING. Please state how you wish goods sent, whether by freight or express, **filling out order blank with care.** Nursery stock is carried by the express companies about 20 per cent less than regular merchandise rates.

TERMS CASH on or before delivery to transportation companies, except that we are pleased to open accounts with patrons by agreement.

OUR RESPONSIBILITY. We refer you to any bank or bankers in Rochester, N. Y.

GUARANTY. While we exercise the greatest care to have our trees and plants true to label, and hold ourselves prepared to replace, on proper proof, all that may prove untrue, we do not give any warranty, expressed or implied, and in case of any error on our part, it is mutually agreed between the purchaser and ourselves that we shall not, at any time, be held responsible for a greater amount than the original price of the trees.

SHIPPING SEASON opens about October 1 and closes June 1st.

HOW TO CARE FOR STOCK WHEN RECEIVED. Soak the trees with water, and either place them in a cellar and keep wet, or bury them in a trench, until the holes are ready for transplanting. If at all dry and shriveled, the best plan is to bury them, root and branch, in wet earth. If frozen, they should be buried in earth until the frost is removed.

FALL PLANTING

When planted in the fall, all trees should be banked up at least one foot high until spring. This overcomes the tendency of the trees to heave out, protects them from mice, and prevents the roots from freezing before they have taken hold of the soil. In planting roses, shrubs, vines and other delicate stock in the fall, the tops should be nearly or quite buried with mellow earth during the first winter. The surplus earth should be removed early in the spring.

DISTANCE BETWEEN TREES AND PLANTS IN PLANTATIONS

Standard Apples, 30 to 40 feet apart each way. In poor soil, 25 feet may be enough.

Standard Pears and Cherries, 20 feet apart each way. Cherries will do at 18 feet, and the dwarf-growing sorts, Dukes and Morellos, even at 16 feet.

Standard Plums, Peaches, Apricots and Nectarines, 16 to 18 feet apart each way.

Quinces, 10 to 12 feet apart each way.

Dwarf or Pyramidal Pears, Cherries and Plums, 10 to 12 feet apart each way. The greater distance is better where land is not scarce.

Dwarf Apples, on Paradise stock (bushes), 6 feet apart.

Nut Trees—American Chestnut, Butternut, Black Walnut, Hickories, 40 to 50 feet.

Sober Paragon Chestnut, English Walnut, Japan Walnut, 30 to 40 feet.

Pecans, 50 to 60 feet.

Filberts and Almonds, 10 to 12 feet.

Currants, Gooseberries and Raspberries, 3 to 4 feet apart.

Blackberries, 6 to 7 feet apart.

Grapes, 8 to 10 feet apart.

NUMBER OF TREES OR PLANTS ON AN ACRE AT VARIOUS DISTANCES

At 4 feet apart each way.....	2729	At 15 feet apart each way.....	200
" 5 " "	1742	" 18 " "	135
" 6 " "	1200	" 20 " "	110
" 8 " "	680	" 25 " "	70
" 10 " "	430	" 30 " "	50
" 12 " "	325		

The number of plants required for an acre, at any given distance apart, may be ascertained by dividing the number of square feet in an acre (43,560) by the number of square feet given to each plant, which is obtained by multiplying the distance between rows by the distance between the plants. Thus, strawberries planted three feet by one foot gives each plant three square feet, or 14,520.

INTRODUCTION

FOR half a century "**From Glen Brothers**" has been a guarantee of first quality stock, true to name, handled and packed right, delivered to customers in the best possible condition. We point with pride to the ornamental trees and shrubs in private and public grounds, parks and streets; the roses and plants growing and blooming in garden and house, the beaming orchards in every fruit locality for evidence in regard to how well we are succeeding in our endeavor to produce the best.

Nothing better illustrates the progress of our country, the advance in civilization its people are making, and the fact that they are learning to live better, than the greatly increased and continuing demand for nursery stock, both fruit and ornamental.

Located near the shores of Lake Ontario, with wide variations of temperature, at times 15 degrees below zero, the conditions are extremely favorable for the production of hardy, robust trees and plants. These conditions—with a soil best suited to produce the healthiest conditions of growth, namely, that solid, firm texture of the wood, with abundant fibrous root, so necessary to successful transplanting—enable us to offer the choicest nursery stock with entire confidence to planters in all sections of the country.

Our experience of nearly half a century has taught us that good cultivation is of supreme importance, hence we spare no pains or expense to maintain the highest efficiency in this direction.

To the planter or purchaser of nursery stock, at least three things are indispensable: first, varieties true to name; second, healthy, vigorous, well-matured trees or plants; and third, careful and judicious packing, without which all may be lost.

We give to our packing and shipping careful personal supervision. And still further to protect our patrons, as well as ourselves, against loss in this direction, we employ the most skilled and competent hands to assist us.

We aim to keep fully abreast of an enlightened and cultivated taste, in the introduction of new and valuable varieties of fruit, 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.

By careful consideration of the wants of our trade and faithful attention to business, we are confident we shall continue to merit and receive a liberal share of the patronage of lovers and buyers of choice fruits and ornamentals.

GLEN BROTHERS

Established 1866

GLENWOOD NURSERY

Incorporated 1907

ROCHESTER, N. Y.

Nursery at Fairport, N. Y.—Main Line N. Y. C. & H. R. R. and R. S. & E. Electric

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HOW TO PLANT

DO NOT make the mistake of planting at random. A fine, well-cut lawn is one of the handsomest features of a place. Trees may be planted along a lane or avenue leading to the house, or dotted about the lawn on lines radiating from it. This will secure light and air, with good views. When practicable, upright shrubs and roses should be planted in beds, each class by itself, about the borders of the grounds. These beds should be well cultivated and the plants annually pruned. When the growth of the plants has made them very thick some should be taken out. It will not do to plant so little that years must elapse before a fine effect will be produced. A surplus should be planted at first, and this gradually taken out. Vines should be planted near to and allowed to climb upon and about the house, or they may be trained on posts, arbors or stakes, placed in suitable locations on the lawn.

WHAT TO PLANT

A detailed list of desirable ornamental trees and shrubs would be little less than a recapitulation of our entire list, but as few have room for all, we here present a list of the most desirable in each class, and refer the reader to the proper places in the Catalogue for descriptions of them:

FLOWERING TREES

Named in the order in which they flower; embracing some of the choicest species.

MAY
 Almond Davidiana.
 Amelanchier.
 Cherry, Large Double-flowered.
 Judas Tree.
 Chinese Magnolia, in variety.
 Almonds, Large Double-flowered.
 Cornus florida, White and Red.

Horse Chestnuts.
 Crabs, flowering.
 Peach, Double-flowered.
 Bird Cherry.
JUNE
 Mountain Ash.
 Thorns, in variety.
 Laburnum.

White Fringe.
 Locust, White.
 Virgilia Lutea.
 Catalpa.
 Lindens, in variety.
JULY
 Chestnut, American.
 Chestnut, Sober Paragon.

TREES WHICH PRODUCE ORNAMENTAL FRUIT SUCCEEDING THE FLOWERS

Celtis occidentalis. Dull red fruit as large as peas.
 Cornus florida. Oval fruit in a head.

Cratægus. Scarlet and yellow fruit in Sept. and Oct.
 Pyrus Sorbus (Mountain Ash). Scarlet fruit in Sept., Oct.

TREES WITH BRIGHT COLORED BARK IN WINTER

Betula alba, White Bark.
 " alba var. laciniata, White Bark.
 Salix vitellina aurea, Yellow Bark.

Salix vitellina var. britzensis, Red Bark.
 " vitellina variety from Russia. Yellow Bark.
 " Colorado. Blue Bark.

FLOWERING SHRUBS WITH VARIEGATED OR COLORED FOLIAGE

Described in their respective places in the Catalogue.

Berberis (Barberry), vulgaris var. purpurea.
 Cissus Variegata.
 Cornus (Dogwood), alba var. elegantissima variegata.
 " Mas. variegata.
 " Siberica foliis alba marginatis.
 " Spæthii.
 Corylus (Filbert), atropurpurea.
 " aurea.
 Diervilla (Weigela), rosea var. nana fol. var.

Diervilla, rosea var. Sieboldii alba marginata.
 Euonymus, radicans variegata.
 Hibiscus (Althæa), Syriacus var. fl. pl. fol. variegata.
 Kerria (Corchorus), Japonica argentea variegata.
 Philadelphus (Syringa), foliis aureis.
 Prunus (Plum), Pissardi.
 Ptelea (Hop Tree), trifoliata var. aurea.
 Sambucus (Elder), Canadensis var. aurea.
 Spiræa, opulifolia aurea.

FLOWERING SHRUBS

Named in the order in which they flower, embracing some of the choicest species.

APRIL
 Daphne Mezereum.
MAY
 Forsythia.
 Japan Quince.
 Prunus Pissardi.
 " triloba.
 Almond, dwarf double-flowered.
 Spiræa prunifolia flore pleno.
JUNE
 Halesia tetraptera.
 Deutzia gracilis.
 " Lemoinei.
 Spiræa lanceolata.
 Viburnum Opulus var. sterilis.
 " tomentosum.

Viburnum plicatum.
 Weigelia, in variety.
 Cornus alba.
 Lilac Josikæa.
 " Japonica.
 " villosa.
 Hydrangea, arborescens grandiflora
 alba.
 Syringa.
 Rhododendrons.
 Spiræa arguta.
 " Thunbergii.
 Lilacs.
 Spiræa Van Houttei.
 Viburnum lantana.
 " " " rugosum.
 Mahonia.

Honeysuckle Tartarian.
 Wistaria.
 Pæonies Herbaceous.
 Clematis, in variety.
 Elder.
 Deutzia crenata flore pleno.
 " Pride of Rochester.
JULY
 Spiræa Billardii.
 " Anthony Waterer.
 " callosa alba.
 " callosa.
AUGUST and SEPTEMBER
 Anemone.
 Althæa, in variety.
 Hydrangea, in variety.
 Clematis paniculata.

SHRUBS WHICH PRODUCE ORNAMENTAL FRUIT SUCCEEDING THE FLOWERS

Barberry, scarlet and violet fruit in September. Cornus alba, white berries in September. Cornus Mas, fruit red, very large and showy in August. Elæagnus longipes, red fruit. Euonymus, red and white fruit. Euonymus latifolius, red fruit. Lonicera, in variety; showy red and yellow fruit. Mahonia, bluish berries in July. Rhamnus, black fruit. Sambucus Canadensis, purple fruit, changing to black in August and September. Sambucus racemosus, red fruit. Symphoricarpos racemosus, white berries all winter. Symphoricarpos vulgaris, red fruit. Viburnum cassinoides, black fruit. Viburnum dentatum, black fruit. Viburnum dilatatum, scarlet fruit. Viburnum lantana, dark purple, nearly black in September. Viburnum molle, black fruit. Viburnum Opulus, red fruit; very ornamental. Viburnum rugosum, very showy fruit in September. Holly, red fruit, autumn and winter.

SHRUBS WITH BRIGHT COLORED BARK IN WINTER

CORNUS—Alba, bright red. Alba elegantissima variegata, bright red. Alba Siberica, the most brilliant red of all. Sanguinea, var. viridissima, green. Stolonifera, dull red or purplish. Stolonifera, var. flaviramea, bright yellow.
 KERRIA—Japonica, green. Japonica flore pleno, green.

VIEW OF FAIRPORT ENGLISH WALNUT BLOCK OF THREE-YEAR TREES IN OUR NURSERY

Nut Department

NUT culture in the United States is in its infancy, although great strides are being made, both in the number of nut trees planted and improvement in variety and quality.

The constant and growing demand for nuts, and the immense quantities of them yearly imported to meet it have given a great impetus to the planting of nut-bearing trees. So palatable and wholesome are the nut-kernels that they should become a staple article of food here as in Europe. The returns from established nut-bearing orchards, as well as numerous experiments, show plainly how successful nut culture may be made in America. Most farms contain land that would pay better planted in nut-bearing trees than in anything else; the nuts, in many cases, paying better than farm crops or fruit, while the trees are growing into valuable timber; at the same time the cost of maintenance is insignificant as compared with a fruit orchard.

Until recently little attention has been given to the Nut Fruits. This is unaccountable, considering the pleasure and profit that may be derived from their cultivation, which is, in fact, simplicity itself, requiring only ordinary labor and little expense.

When the up-keep and care of fruit orchards is considered, it is easily demonstrated that the commercial cultivation of Walnuts, Pecans, and Chestnuts offers safe and permanent investments, with generous returns.

Nursery production of these hardy, acclimated varieties of nut trees is attended by more or less difficulty and greater cost, but they relieve the planter of all anxiety. He may leave them out in the rain and frost; almost forgetting them, in fact, and there he will find them in a few years, each tree yielding nuts that will bring a larger dividend than a thousand dollars in the bank. Even a few carefully selected nut trees will prove a great heritage.

The Rural New Yorker says: "Nut growing is a business which is to be a great feature of future farming. * * * If you plant a nut grove to-day, before it comes to bearing you will find demand ahead of supply. A few men realize what is coming and are interesting themselves in improved varieties of nuts—such as hickories, chestnuts or pecans."

From the *American Cultivator*: "Fortunes are sure to be accumulated by growers of nuts who engage largely and intelligently in the business. * * * No industry embodies to a greater degree the elements of safety, profit and permanence as an investment. Thousands of people all over our land can make their homes more pleasant and their farms places of increased profit by planting the nut trees best suited to their locality."

All of the varieties described in the following pages may be relied upon to be exactly as represented, and it is our honest desire to make the planter of nut-bearing trees more independent financially, if he plants for profit, and happier if he plants for pleasure; and last but not least, nothing can be more interesting or yield greater pleasure than nut trees about the home, as many kinds form the most beautiful shade trees in addition to producing valuable crops of nuts.

ALMONDS

The Almonds are budded upon seedlings grown from natural peach seed, and are regarded as quite as hardy.

The soil best suited to the Almond is a light, well drained loam. The tree makes a strong and rapid root growth and is more tolerant of drouth than any other of our leading deciduous fruit trees. For this reason, as well as to avoid frost, it is often desirable to place the Almond on the higher and drier lands providing the soil is not heavy and too retentive of surplus water in the rainy season. The root is most intolerant of standing water and will quickly die if exposed to it.

3-4 ft., 50 cts. each; \$5 per doz.; \$35 per 100.

Hard Shell. The tree is very showy when in bloom. The kernels of the nuts are large, plump and sweet. Hardy and easy to grow.

Almond, var. (Princess). Soft shell, most sweet and tender. Needs protection in North.

BUTTERNUTS (*Juglans cinerea*)

BUTTERNUTS

This lofty, spreading tree is one of our finest native nut trees, valued for its tropical appearance and beautiful wood, as well as for its nuts. Produces large, handsome, elongated nuts with rich, sweet, oily kernel of marked though most delicate flavor; very nutritious. Cultivation increases the size of the nuts. The tree grows rapidly and yields large crops in a few years. At

present the supply is insufficient for the demand of a single city market. There are large profits in butternut growing. A small outlay will bring large returns as soon as the trees begin to bear. A most homeful tree, and should be planted near the house.

Butternut (White Walnut).

5-7 ft., \$1 each; \$9 per doz.; \$60 per 100.

SOBER PARAGON—4 feet high, 34 burrs

THE CHESTNUTS

American Sweet. The nuts of this tree form quite an item in our commerce. This chestnut is also a grand timber and ornamental shade tree, spreading, in midsummer, billowy masses of creamy, fragrant catkins above its large, deep green leaves, making a most beautiful specimen on the lawn. 5-6 ft., \$1 each; \$9 per doz; \$60 per 100.

Japan (Giant). Decidedly ornamental, hardy and productive; of dwarf habit, bearing extremely young. Nuts of enormous size, but coarse and of poor quality. 3-4 ft., \$1 each; \$8 per doz.; \$60 per 100.

Rochester. An improved native. Nuts of the largest size, very sweet, with nutty flavor. Tree an unusually rapid grower, abundant bearer and perfectly hardy. 4-5 ft., \$1.25 each; \$12 per doz.

Sober Paragon. The largest and sweetest of all the large Chestnuts. A rapid growing tree of beautiful proportions. Bears in the nursery rows. Prof. Bracket, United States Pomologist, Washington, D. C., speaks of Sober Paragon as follows: "The Sober Paragon comes the nearest in quality to the native Chestnut of any of the cultivated varieties that I have examined. It is of large size, fine appearance and excellent flavor." Grafted trees, 3-5 ft., \$1.50 each; \$15.00 per doz.

Spanish. Handsome, round-headed tree, producing large crops of large nuts that sell readily at good prices. Not so sweet as Sober or American. Beautiful for lawn. 4-5 ft., \$1 each; \$9 per doz.; \$65 per 100.

The Filberts

FILBERT (*Corylus avellana*)

Pure Strain Filberts for Universal Planting

In spite of the fact that American dealers are constantly clamoring for filberts, and that they can be grown far easier than potatoes or wheat, the cultivation of filberts has been almost entirely neglected.

The Filbert, both English and American varieties, is probably the least understood of all nut trees in the east. Yet it is a nut tree of great commercial value; at the present time in Europe and our own north-west, and will be in the near future throughout the States of the east and middle west.

It is perfectly hardy all through the north, withstanding at our nurseries 15 degrees below zero without winter killing, or injuring the crop, so that iron-clad hardiness, rapidity of growth, earliness of bearing, and great adaptability, are the four splendid qualities which mean a large and extensive planting all through the east.

Planting should be at a distance of twelve to fifteen feet, and moderately rich, well-drained soil is required. Pruning is of special importance if grown in tree form, although they bear abundantly, if permitted, in the natural form, which is that of a many-stemmed bush. The nuts should not be gathered until ripe, the condition indicated by the browning of the edges of the husk.

The Filbert is well adapted to be used as a filler for Walnut orchards, as it will come into bearing early and will never reach a height to interfere with the Walnut trees and may be easily removed when the Walnuts need all the space. They are usually grown in tree form, and not as bushes, when planted in commercial orchards. The thin, unfruitful twigs are removed and the fruitful limbs shortened back nearly to the female buds. Care should be taken to leave sufficient male catkins for an ample supply of pollen. The fruit spurs are near the extremities of the last year's growth, and nuts are more abundant where light and air have ready access.

In "Nut Culture in the United States" published by the United States Department of Agriculture, it states:

"All are unisexual, having staminate blossoms in catkins, developed in the axils of the leaves on the wood growth of the previous year. The pistilate blossoms compose a star-like tuft of crimson stigmas projecting beyond the short, scaly bud, the inner scales of which keep pace with the growth of the enlarging pistils so as to nearly or wholly enclose it at maturity. The pistilate blossoms sometimes bloom later in the spring than the staminate ones on the same bush, and in such cases it is necessary to supply pollen from other sources at the proper time to secure a crop of nuts."

Felix Gillet, the nut specialist, says: "Whether Filberts are planted orchard-like, or in cordons around a field or along a ditch or in rows through an orchard or vineyard or in groups, they should in every instance, to bear well, be trained as a tree and not as a bush. It is as easy to train a filbert as a standard or a half standard tree as any other nut or fruit tree. It is true that the Filbert, especially when young, has a great tendency to grow sprouts from the roots. These should be unmercifully grubbed whenever showing themselves."

American Varieties

Purple Leaved (*Avellana Atro-purpurea*). Nut large, thin-shelled, delicious quality, one of the best. The leaves and husk are of a deep purple color, which is retained until frost. Very ornamental.

Hazlenut (*American Filbert*). Bears excellent nuts and in great quantities; also very ornamental.

Prices: 2-3 ft., \$.50 each; \$5.00 per doz.; \$35.00 per 100.

3-4 ft., \$.75 each; \$7.50 per doz.; \$50.00 per 100.

European Varieties

Kentish Cob (*English*). Nut large, oblong, somewhat compressed, kernel plump and of rich flavor; an excellent keeper. Husk quite smooth, longer than nut and but slightly cut in margin. Tree productive. Considered the best variety grown in England, where it has been known since 1812.

Prices: 2-3 ft., \$.75 each; \$7.50 per doz.; \$40.00 per 100.

3-4 ft., \$1.00 each; \$10.00 per doz.; \$50.00 per 100.

5-6 ft., \$2.00 each; \$20.00 per doz.

COSFORD—PAPER SHELL

LAYERED PLANTS—FROM IMPORTED PARENT PLANTS

Nut oblong. Kernel plump and of the richest flavor. This variety is very productive and highly prized in Europe because of its thin shell and high quality, rarely seen in American markets.

Strong layered plants, 2-3 ft., \$1.00 each; \$10.00 per doz.; \$65.00 per 100.

Strong layered plants, 3-4 ft., \$1.50 each; \$15.00 per doz.

SPECIMEN TREES. Cosford

We have recently secured from one of the oldest nurseries in Europe, making a specialty of growing and training bearing trees for large estates, its entire supply of these rare trees.

The European War has made this possible and we offer a limited number of these trained specimen trees coming into bearing.

Standards 7-8 ft. in height branched, with 5-6 ft. trunk or stem, 1½-2 inch caliper, \$10.00 each; \$100.00 per doz.

CORYLUS (*Filberts*)

HICORIA (*Hickory*)

THE HICKORIES

Notwithstanding the high esteem in which the hickory nut has been held since the settlement of America, in consequence of the difficulty with which it is propagated by budding or grafting, it has not been found sufficiently promising from an economic standpoint to justify extensive planting. As the hickories are slow growing at best, they should not be planted on other than fertile soil. Of the two varieties, Shagbark and Shellbark, the latter requires richer cultivation than the other. Deep, well-drained, fertile loams, either of sandy or clayey nature, are acceptable to both varieties.

Owing to the fact that hickories form only a tap root, and no fibrous roots, we recommend the planting of the small trees. Prices: 6-8 in. transplants, 25 cts. each; \$2 per doz.; \$15 per 100; 2-3 ft., \$1.50 each; \$15.00 per doz.

Shagbark (*H. ovata*). In flavor and quality of kernel this is generally esteemed the choicest of our native nuts, of all nuts, some experts have said. The tree is a handsome, stately shade tree, with tough, white wood of great strength and elasticity.

GLENWOOD NURSERY

PAPER-SHELL PECANS FOR NORTHERN PLANTING

Interest in the growing of pecans is no longer confined to the Southern states, but is a success far beyond the limits of what has heretofore been known as "The Pecan Area." The large number of interested parties here in the North who desire to plant hardy pecan trees adapted to the middle and Northern states, has stimulated experiments which have extended over several years and necessitated the expenditure of large sums of money.

The Pecan tree is the most cosmopolitan that we have as regards its adaptability to various soils and climatic conditions. It is found growing naturally as far north as Davenport, Ia., where the tree is exposed to winter temperatures as low as forty degrees below zero occasionally.

Its behavior on various soils and locations is no less striking. It is found growing from the lower river bottoms, where it is occasionally flooded for several weeks at a time, up to at least 1,500 feet elevation, and on all kinds of soil, from the clays and clay loams to the lightest and poorest sandy soils which grow the "scrub pine."

Some of the finest and most productive northern varieties that have been discovered have been found near the northern limit of the Pecan's natural range, and as these trees will be unquestionably hardy, and will mature their fruit anywhere that our more common orchard fruits can be grown, the area of the successful culture of this delicious and high-priced nut can now be greatly extended very profitably. The fruit of these northern varieties can and will compete very successfully with the best southern product.

Some of the finest Indiana varieties bear nuts under the northern conditions nearly as large as the best and most largely planted southern varieties and the northern varieties selected for propagation are always well filled and of better quality than the finest southern varieties.

The hardy varieties will produce satisfactory results in the Southland, but it is north of the 35th and south of the 45th parallels where they are at their best. In fact, there are some hardy Pecan trees in Central Michigan and Canada that are giving most excellent and satisfactory results.

Several thousand trees, in our Nursery at Fairport, ten miles east of Rochester, in all stages of growth, covering a planting period of five years, without the loss of a single tree, is ample evidence of their iron-clad hardness and constitution.

ACCLIMATED BUDDED PECANS. PAPER-SHELL VARIETIES

Indiana. A hardy variety originating in Knox County, Indiana. The original tree, which is fifty or sixty feet high and about five feet in circumference, bears annual crops of choice nuts. The nuts are medium in size, with a full, plump, light-colored kernel which is fine grained, sweet, nutty and of good quality.

INDIANA

Butterick. Originated near Mt.

Carmel, Ill., in the Wabash Valley. The nut is large and a real paper-shell. The meat is full and plump and of excellent quality. The original tree bears very heavily, having produced 350 pounds of excellent Pecans on the "off year," 1913, when the crop in general in that section was very light. The Butterick combines large size, a real

BUTTERICK

paper shall nut of high quality and a very vigorous and productive tree, making it highly desirable for market plantings as well as for home use.

Busseron. Originated in Knox County, Ind. The Busseron is one of the best of the Indiana varieties. The nut is large, of good quality and fine appearance. Mr. Niblack says the old Busseron tree has the greatest bearing record of any Pecan tree in the state of Indiana, and annually bears large crops of the finest nuts.

BUSSERON

Greenriver. Originated in Henderson County, Ky. Medium sized nut of deep golden color. The shell very thin, the kernel a rich cream color of highest quality. The tree is one of the best growers and an excellent bearer. A veritable aristocrat among Pecans.

GREENRIVER

PRICES

	Each	Per Doz.	Per 100
2-3 ft. Budded	\$2.00	\$20.00	\$140.00
3-4 ft. Budded	2.50	25.00	150.00
4-6 ft. Budded	3.00	30.00

A view in the Thomson English Walnut orchard near Rochester. The largest commercial orchard in the East. 228 trees raised from seed planted by Mr. Thomson in 1886. This orchard has endured all these years with absolutely no winter killing—with occasional temperatures twenty degrees below zero. This orchard last season (1915) produced 260 bushels, the bulk of which sold at 25c per pound—32 pounds per bushel or nearly \$2,000.

ENGLISH WALNUTS

HE past few years have witnessed a remarkable development in the planting of English Walnuts, and there is no question in our minds but what there is a great future in the cultivation of English Walnuts in the Eastern and Northern states, as well as in California and the South. They are grown successfully here in Monroe County, New York, and there are several large and productive orchards in this and adjoining counties. In point of hardiness, we have seen peach trees planted alongside of our acclimated English Walnut killed by frost and the walnut escape. It is generally considered now that the acclimated trees will succeed wherever peaches thrive.

Probably no branch of tree cultivation is as well assured of a profitable market for all products. The immense importation of foreign nuts every year gives some idea of the market to be supplied. It is a fact not generally known that we import annually from European and other countries 32,000,000 pounds of English Walnuts, one and one-half times as many as California has produced in the year of largest crop, so great is the home consumption.

Transplanting may be done with equal success in spring or fall. In planting, the tap root should be severely pruned so as to promote the growth of numerous fibrous roots as well as laterals. The trees should be mulched liberally with coarse stable manure as soon as planted and for the first two or three years the ground should be cultivated or hoed. Plant medium sized trees.

We are the farthest North growers of English Walnut, and naturally believe that our severe climatic conditions insure much hardier trees than can be grown farther South.

VARIETIES

From observation and years of experience, for real practical and commercial purposes, we prefer and recommend for severe climates, trees kept closely to the parent type, of the following strains, which reproduce fairly true to the original stock, and are reliable producers.

These are splendid trees for avenue or orchard planting. Sure to produce first-class nuts and are blight resistant.

Do not be misled by the many statements made by self-styled "Walnut Experts" and "Literary Horticulturists," who were unheard of a few years ago and who are endeavoring to "Reap what they have not sown." It's your time, your land, your success that is at stake.

At the proceedings of the Annual Convention of the Western Walnut Association, Charles Trunk, a successful commercial grower of English Walnuts, spoke as follows: "I would like to say to prospective Walnut growers, that it is best to buy of some reliable nursery company, being willing to pay a good price for a good tree. If you do this, you are starting out in the right direction. If it should prove in later years that grafted Walnuts are better than seedling Walnut trees, it is easy to top-graft seedlings, but if it should prove otherwise, you never can make the grafted tree into a seedling, which in our opinion is preferable in this locality.

FRANQUETTE

FAIRPORT

MAYETTE

THOMSON

Types Especially Recommended

Franquette. Of French origin and the peer of all the French varieties. Very hardy, blooms late, thereby escaping the late frosts. A clean, robust grower, and bears abundantly and regularly. The rich, exquisite flavor of its meat makes it a favorite for dessert. Owing to its long shape it carries from one to two ounces more of meat to the pound than the round nut sorts.

Mayette. A standard variety, well tested. The Grenoble nut of commerce. Being the highest priced Walnut in France, cheaper grades are often mixed with it, causing much dissatisfaction among the importers of nuts as well as the consumers. A dessert nut of highest quality, sweet and nutty in flavor. Blooming very late, it is safe from late frosts. A most desirable variety to plant. **Special early bearing trees 6-8 ft., \$3 each; \$30 per doz.**

Fairport. Originated in Rochester. A safe and reliable variety to plant in zero climates. Bears at four years of age; nut round, full meated, fine quality, thin shell. Tree a rapid grower, blooms late. Nuts are ripe and fall from tree in September. We believe this variety will give complete satisfaction with no losses if given intelligent care.

Thomson. Real paper shell. Origin, Avon, N. Y. (See cut of orchard, page 8.) A strong growing, ironclad variety, safe and reliable. A commercial nut for severe climates; sweet and delicious, selling at wholesale from 4 to 6 cents more per pound in Rochester markets than the California or French nuts.

	Each	Per Doz.	Per 100
2-3 ft.....	\$1.00	\$10.00	\$60.00
3-4 ft.....	1.50	15.00	75.00
5-6 ft. Specimen.	2.50	25.00	200.00

EXTRA LARGE ENGLISH WALNUT TREES

Superb for Lawns and Driveways

For those of our customers who wish to get the earliest possible results, both in bearing, age and appearance, we have to offer this coming Spring a few beautiful specimen English Walnut trees, **Mayette strain**. Each tree will stand 8 to 10 ft. in height, branched, with stems 6 to 7 ft. Circumference at base of stem, 4½ to 5 inches. Nothing finer could be grown or procured.

Price, \$15 each; \$150 per doz.

FAIRPORT—PLANTED 1907—FIRST CROP 1911

IN YOUR HOME—DISH OF LADY EDITH

ENGLISH WALNUT ON BLACK WALNUT

The planting of grafted English Walnut trees in the Eastern and Northern states has been limited up to this time because of the difficulty in propagating by budding or grafting—such attempts being unsuccessful, until recently.

Although there are as yet, no commercial orchards of grafted trees here in the East, many authorities claim and believe that the grafted trees are going to be sufficiently successful to warrant commercial planting.

We have had very good success in grafting upon black walnut, and recommend for the consideration of those of our customers who prefer the grafted trees, the following varieties, of the highest merit as regards quality and hardiness—

FAIRPORT
FRANQUETTE

MAYETTE
THOMSON

For descriptions see page 9

These trees are carefully grown, have withstood temperatures of ten to fifteen degrees below zero without injury, and have proved their hardiness.

Prices 2-3 ft. Grafted, \$2.00 each; \$18 per doz.

3-4 ft. Grafted, \$2.50 each; \$25 per doz.

Grafted trees bear early, often the second year, and are of very rapid growth.

Lady Edith. The aristocrat among eastern English Walnuts—original or parent tree was found in Le Roy, N. Y., where winter conditions are very severe. It has borne regularly good crops of the smoothest and handsomest nuts we have ever seen. The nut is of more than medium size, with smooth, handsome paper-shell thickness, full meated and of remarkable fine flavor.

2-3 ft. Grafted on Black Walnut, \$3 each

BLACK WALNUT

The American Black Walnut is one of the most valuable and enduring of our timber trees, also a magnificent shade tree, producing a rich, meaty nut, well known to us all in an abstract way, perhaps,

but not in a real personal way that comes from picking up these delicious nuts from your own lawn.

The Black Walnut is hardy everywhere—a rapid grower, increasing in diameter from 1 to 1½ inches each year and ought to be widely and universally planted if only for its timber, which has of late years become very valuable. It also solves the problem of utilizing waste land that cannot be cultivated. The trees need little or no attention, and may be planted on rough land or along fences, ditches, and road sides, where it would not be practical to plant trees requiring cultivation.

For reforesting large areas these trees are ideal, and we can make a very attractive price when large quantities are desired for this purpose. We offer two grades:

3-4 ft., 50 cts. each; \$5 per doz.; \$25 per 100

6-8 ft., 75 cts. each; \$7 per doz.; \$50 per 100

Extra. 8-10 ft., \$1.50 each; \$15 per doz.

STABLER GRAFTED BLACK WALNUT

An improved Black Walnut is something out of the ordinary, but it would be quite impossible to exaggerate the superior qualities of the Stabler. It is really in a class by itself.

There has never been any question about the value of Black Walnuts as to the nuts or meats if a good cracker could be found. With the Stabler it is not difficult to get out from fifty to eighty per cent whole halves and a great many of the kernels come out whole. You will be perfectly safe in planting all the Stabler you can find room for.

We offer for Fall of 1917 and will book orders now for delivery beginning with October.

2-3 ft. Grafted Trees, \$1.50 each; \$15 per doz.

3-4 ft. Grafted Trees, \$2.00 each; \$20 per doz.

JAPANESE WALNUTS

Cordiformis (*J. cordiformis*). This, as the name indicates, is a heart-shaped nut. It differs from the Sieboldi in form of the nuts, which are broad, pointed, flattened somewhat resembling the shell-bark Hickory; meat large, of best quality and easily removed, as the shell is thin and parts easily at the sutures, enabling one to get the kernel out whole. Of interest to northern planters on account of the great hardiness. Withstands temperatures of 20 to 30 degrees below zero without injury. The flavor is something between that of an English Walnut and a Butternut. As a dessert nut it has few superiors; the meat being very sweet, is used extensively for candied nuts. We recommend it as one of the very best Japanese varieties. Comes into bearing at an early age, usually 3 to 4 years.

2-3 ft., 75 cts. each; \$7 per doz.; \$50 per 100

4-5 ft., \$1 each; \$9 per doz.; \$65 per 100

Hardy Fruits

APPLES

No other fruit occupies, in the North Temperate Zone, the commanding position of the apple. Whether it be in size, form or color; in flavor, sweet or sour; an infinite variety of shades; in crispness or tenderness, it will in some variety or other suit any taste. No ordinary farm crop will, on the average, produce one-fourth as much income per acre as a good apple orchard. The fact that six to eight years must elapse before a newly planted orchard will begin to bear deters many from planting. But, as a matter of fact, land can be used a large part of the time for crops, and no great investment is required to plant at the rate of 30 to 50 trees to the acre. When once in bearing, with little actual time spent upon it each year, it will be an unfailing source of cash income, if properly selected from varieties recommended in our list.

Let no one be disappointed if he misses from our list some names familiar in his childhood, varieties which the glamour of years and the voracious appetite of youth cause to stand out in memory so delightfully. That memory is often a delusion. We still propagate only those varieties which, having stood the test of time, are at this day holding their own with the best. Some old varieties, after being eclipsed for years by fungous diseases which make them well nigh worthless, are now again made worth growing by the victory of science over those diseases.

**Strong selected 2-year trees, 50 cts. each;
\$3.50 per doz.; \$25 per 100.**

- Early Harvest** (*Yellow Harvest*). Pale yellow, fine flavor; good bearer. August.
- Early Strawberry**. Medium; striped deep red; tender; sub-acid and excellent; productive. August.
- Golden Sweet**. Rather large, pale yellow; very sweet and good. Strong grower and good bearer. August.
- Red Astrachan**. Large, roundish, juicy, rich, acid, beautiful. August.
- Sops of Wine**. Medium size; oblong, red; flesh white, often stained; mild and pleasant; productive. August and September.
- Yellow Transparent**. Russian; pale yellow; good size; acid; good; earliest of all.

AUTUMN APPLES

- Fameuse** (*Snow Apple*). Deep crimson; flesh white, tender, delicious.
- Fall Pippin**. Large, yellow, rich and juicy; abundant bearer.
- Gravenstein**. Large, yellow, striped with red. High flavored. September.
- Maiden Blush**. Yellow with red cheek; pleasant acid flavor.
- Oldenburg** (*Duchess of Oldenburg*). Streaked with red and yellow; tender and juicy; very hardy.
- St. Lawrence**. Large, yellowish striped and splashed with carmine; flesh white, lightly stained; crisp, juicy, tender and vinous. Tree hardy and productive. September.
- Twenty-Ounce** (*Cayuga Red Streak*). Very large, nearly round; yellow, striped with red; quality good. Excellent for baking.

DELICIOUS

WINTER APPLES

Arkansas Beauty. Very large; deep red, tender, yet firm; yellow; one of the handsomest apples grown; hardy, vigorous, very productive. December to May.

Bismarck. Flesh yellow; wonderfully prolific; very early bearer.

Baldwin. Large, deep red; one of the best and most popular.

Banana. New; excellent. Has a delightful banana perfume. Fruit keeps well till spring; the color red blush on a deep yellow ground. It is of large size and very showy in appearance.

Delicious. A remarkable variety rapidly taking first rank both for commercial and home orchards. No new variety has ever so quickly gained popularity in so many different apple sections of our country. Fruit large, nearly covered with brilliant dark red, flesh fine grained, crisp and melting, juicy with a delightful aroma; of very highest quality. A splendid keeper and shipper. Tree one of the hardiest, a vigorous grower, with good foliage. A regular annual bearer. 75 cts. each; \$5 per doz.; \$35 per 100.

Grimes' Golden. Medium size, highest quality.

Jonathan. Red striped; flesh white; rich.

Lady. A beautiful little dessert fruit; deep red cheek; juicy, rich and pleasant.

McIntosh. Flesh white, fine, tender, juicy and refreshing.

Northern Spy. Large, conical, striped with red; tender, rich, delicious.

Opalescent. New. The handsomest Apple ever put on the market. Color light shading to very dark crimson with many yellow dots; skin smooth, susceptible of a very high polish reflecting objects like a mirror; flesh yellowish, tender, juicy and good. The original tree has never failed to pro-

duce from a moderate to a full crop. It is not only a beauty, but all right for size, quality and productiveness, qualities rarely combined in one variety. Season, Dec. to Mar. 75 cts. each; \$5 per doz.; \$35 per 100.

R. I. Greening. Large; greenish yellow; tender, rich, sub-acid. Tree grows crooked, strong and spreading. December to April.

Stayman (Winesap). Medium, dark red; excellent.

Tompkins' King. Large; red; one of the best.

Wagener. Red; sub-acid; bears young.

Wealthy. Perfectly hardy, vigorous and productive. Fruit of good size, red streaked with white; quality good. Nov. to Feb.

Westfield (Seek no Further). Tender, rich spicy flavor. Medium to large.

Wolf River. A new and beautiful fruit of the very largest size. Origin near Wolf River, Wisconsin, and may well be classed among the ironclads. Skin greenish yellow, shaded and crimson; flesh white, juicy, tender, with a mild, sub-acid flavor.

Yellow Bellefleur. Large, yellow, with blush cheek; juicy and delicious.

DWARF APPLES

They are most charming and lovable little trees to care for, and full of delightful surprises, with their almost unbelievable loads of the largest and handsomest apples. They begin bearing in three years, and may be planted 5 or 6 feet apart. Also grown upon trellises and walls in espalier form.

75 cts. each; \$7 per doz.

Baldwin
McIntosh

Northern Spy
Wealthy

Yellow Transparent

CRAB APPLES

50 cts. each; \$4 per doz.

Hyslop. Large, deep crimson fruit; vigorous.

Martha. Yellow, shaded with red. Bears enormously.

DWARF APPLE

Transcendent. Skin yellow, striped with red; flesh crisp and juicy. One of the best known varieties.

Whitney. Large glossy green, striped and splashed with carmine; flesh firm, juicy, and flavor very pleasant. A great bearer and very hardy.

APRICOTS

50 cts. each; \$4 per doz.

Acme. Fruit of large size, yellow, with red cheek, good quality; free-stone. August.

Harris. Large, rich, golden yellow.

Moorpark. August. Firm, juicy; fruit large.

CHERRIES

The cherry thrives best on a dry, sandy or gravelly soil, and there attains its highest perfection, but will do well in almost any situation except a wet one. We divide them into two classes: (1) Hearts and Bigarreaus; (2) Dukes and Morellos. The former are strong and vigorous growers, making large, open, spreading heads; their fruit is large, heart-shaped, meaty and sweet. The Dukes and Morellos do not attain so large a size, and fruit is usually sour.

For dry soils we rate the cherry, and particularly the Morellos class, one of the most profitable fruits grown. The Hearts and Bigarreaus are profitable for home market, but for shipping (except the Dikeman) the Dukes and Morellos carry the best and yield the largest returns. Ordinary well-grown trees produce from 5 bushels per tree upwards; the fruit brings, one year with another, \$2 to \$3 per bushel.

Strong, selected 2-year trees, 50 cts. each;
\$5 per doz.; \$40 per 100.

HEARTS AND BIGARREAUS

Dikeman. The gem among cherries; has the advantage of being the latest ripening sweet cherry known; hence placed on the market two or three weeks after other sorts are gone, it commands highest price. Black, good size, and in texture being meaty and solid; is a good shipper.

Downer. Rather large, light red.

Eagle. Large, black; tender and high-flavored. Early July.

Governor Wood. Clear, light red; tender.

Mercer. Dark red, sweet; good shipper and not liable to be wormy.

Napoleon. Large, sweet, white.

Schmidt. Large, dark color; fine flavor; bears abundantly.

Spanish. Pale yellow with red cheeks. Firm, juicy and delicious.

Tartarian. Very large, black, tender; the most popular variety.

DUKES AND MORELLOS

Large Montmorency. Tree very hardy and an immense bearer; commences to fruit while young and is loaded annually thereafter with

DIKEMAN CHERRY

fine crops. Fruit large, fine flavor, and of bright clear, shining red. Valuable everywhere. A week later than Early Richmond. The finest acid cherry grown.

Morello. Blackish-red; rich, juicy.

Richmond. An early red, acid cherry; very valuable for cooking early in the season; free grower. Ripens through June.

MULBERRIES

For description, see *Morus*, page 27.

PEACHES

The peach tree requires a well-drained, moderately rich soil; warm, sandy loam is probably the best. In order to preserve the continued healthy growth of the tree and the fine quality of the fruit the peach should have the shoots and branches cut back to one-half the preceding season's growth every year, so as to preserve a round, vigorous head; this should be done the last of February, or as early in the spring as practicable. The land should not be seeded to grass, but kept in constant cultivation.

The following varieties have been selected out of hundreds, the best only being chosen. They furnish a succession for about two months, commencing the early part of August.

The trees are all shipped with one-year top and two-year root. The size will vary according to the season and variety. Plant 16 to 18 feet apart.

Strong, selected trees, 25 cts. each; \$2.50 per doz.;
\$15 per 100.

PEACHES. (See Page 13)

Alexander. Medium size; skin greenish white, nearly covered with rich red; flesh melting, juicy, sweet.

Carman. Large; color creamy white or pale yellow with deep blush; skin very tough; flesh tender, fine flavor. One of the hardiest in bud. In shipping qualities and freedom from rot it is unsurpassed. August.

Champion. Tree and fruit-buds extremely hardy; has stood 18 degrees below zero and produced a full crop the following summer. Fruit often 10 inches in circumference; freestone.

Crosby. Has stood 22 degrees below zero without injury to the tree or fruit-buds, and in every respect has proved a remarkably fine peach for home use or market.

Early Crawford. A magnificent large yellow peach of good quality. Its fine size, beauty and productiveness make it one of the most popular sorts; no other variety has been so extensively planted. First of September.

Elberta. The great market peach; perfectly hardy, and is the very best peach for home use or market. Ripens with Early Crawford.

Fitzgerald. Fully equal to Early Crawford in size, quality and color, with much smaller pit; early bearer, often when two years from bud. Fruit very large, brilliant yellow with red cheek; highest quality; ripens just after Early Crawford.

Late Crawford. Fruit of large size; skin yellow or greenish yellow, with dull red cheek; flesh yellow; one of the finest late sorts.

Mayflower. Earliest peach known; color red all over, beautiful appearance. Carries well to market, not being tender. Blooms very late, crop never entirely cut off by late frosts; size medium, quality good.

Mountain Rose. Large; red; flesh white, juicy, rich and excellent; should be in every collection.

Oldmixon Cling. Large; pale yellow, with red cheek; juicy, rich and high flavored; one of the best clingstone peaches. September.

Oldmixon Free. Large; pale yellow, with a deep red cheek; tender, rich and good; one of the best. First to middle of September.

Rochester (new). Large yellow and red freestone, exquisite flavor, excelling all other varieties. Bears second season. Tree planted spring, 1914, bore 17 large delicious peaches in August, 1915. \$1 each; \$5 per six; \$9 per doz.; \$60 per 100.

PEARS

This fruit may now be had in varieties which will be in good eating condition from August until early spring. It is a very profitable fruit to grow and will especially reward good cultivation and care. They should be gathered from ten days to two weeks before they are fully ripe, when, on gently lifting the fruit, the stem will readily separate from the limb. Only the most perfect specimens should be marketed to insure the highest price, and they should be handled and packed with care to avoid bruising. They should be kept in a dark place until fully matured. Winter pears may hang on the trees until there is danger of frost, and then placed in a dry cellar to mature.

The soil should be rich and well cultivated. A pear orchard should not be permitted to "go to grass." They should be pruned every year, dwarfs especially. Dwarfs should have low heads and be trained in pyramidal form, one-half of the previous season's growth being cut off each spring.

Strong, selected trees, 50 cts. each; \$4.50 per doz.; \$35 per 100.

SUMMER PEARS

Bartlett. Large size, often a beautiful blush next the sun; buttery, very juicy and high flavored; bears early and abundantly.

Clapp Favorite. Very large; yellowish green to full yellow when ripe, marbled with dull red in the sun, and covered with small russet specks; vinous, melting and rich. Should be gathered early.

Koonce. Medium to large; very handsome; flesh juicy, sweet, spicy, good.

PEARS

PEARS (Continued)

- Osband.** Yellow with red cheek; half melting, mild and pleasant.
- Tyson.** Bright yellow, shaded with reddish brown, buttery, sweet, aromatic, excellent.
- Wilder Early.** Rather small; greenish yellow, with a brownish red cheek; handsome, melting, sweet.

AUTUMN PEARS

- Anjou** (*Beurre d'Anjou*). Large, handsome; buttery and melting with sprightly, vinous flavor.
- Angouleme.** Large, with rough and uneven surface; greenish yellow, with a dull red cheek; vigorous and strong; a good bearer while quite young.
- Flemish.** Large size; greenish yellow and brown; rich and juicy. An old and highly esteemed variety.
- Kieffer.** Vigorous grower, early and regular bearer and very productive; fruit large, rich yellow, tinged with red, somewhat russety and very handsome; flesh white, buttery and juicy.
- Seckel.** Small size; yellowish russet, with a red cheek; flesh whitish, buttery, very juicy and melting.
- Sheldon.** Large size, roundish; greenish yellow; very juicy, melting, sweet and vinous.
- Worden.** Color, golden yellow, with crimson cheek. Very juicy, buttery, melting; one of the choicest.

DWARF PEARS

35 cts. each; \$3.50 per doz.; \$30 per 100.

As certain varieties of pears are not successful when grown as dwarfs, we herewith give a special list of such as are most suitable, and of which the Angouleme is decidedly the best of all.

Anjou	Kieffer
Clapp Favorite	Louise Bonne
Angouleme	Lawrence

PERSIMMONS (Date Plum)

- American.** Will thrive and ripen its fruit as far north as the Great Lakes. 50 cts. each; \$5 per doz.
- Japanese.** Grafted varieties, excellent trees. 3-4 ft., \$1 each; \$9 per doz.

PLUMS

The finer kinds of plums are beautiful dessert fruits, of rich and luscious flavor. For cooking and canning they are unsurpassed. For best flavor they should be allowed to remain on the tree until fully ripe; but for shipping they must be gathered a very few days earlier, when they may be shipped long distances, arriving in good condition. All in the list are hardy and vigorous in severe climates.

Plums should be pruned sufficiently to prevent a straggling growth, and to keep the head from being too crowded. "Black knot" must be removed as soon as it is discovered. The only remedy is to cut off the diseased part and burn it. Permit no black knot to exist about your premises or your neighbor's, if you can help it, but have it removed and burned.

The plum does best in heavy loam; but it will do extremely well on a shaly or gravelly loam, especially if there be some clay in the soil. They should be thoroughly cultivated and not allowed to stand in grass.

Strong, selected trees, 50 cts. each; \$4 per doz.; \$30 per 100.

PLUMS

EUROPEAN VARIETIES

- Bradshaw.** Large, violet red; juicy, pleasant.
- German Prune.** Large, oval, dark purple; agreeable flavor and esteemed for drying.
- Green Gage.** Small, but of the highest excellence. September.
- Lombard.** Oval; violet-red; flesh yellow, juicy and pleasant; a great bearer. September.
- Moore Arctic.** Size medium; skin purplish black, with a thin blue bloom; flesh greenish yellow, juicy, sweet.
- Shipper Pride.** Large, dark purple; quality fine, juicy and sweet. Excellent for canning.
- Shropshire Damson** (*Prune Damson*). An English variety of great merit for preserving. Large, and much more desirable than the common damson.
- Yellow Gage** (*Prince's Yellow Gage*). Large, oval; golden yellow; flesh deep yellow, rich.

JAPAN VARIETIES

- Abundance.** Comes into bearing remarkably young and yields abundantly. Color rich, bright cherry-red, with a distinct bloom, and highly perfumed.
- Burbank.** The fruit is large, nearly globular, clear, cherry-red with a thin lilac bloom; flesh a deep yellow, very sweet, with a peculiar and very agreeable flavor.
- October Purple.** Productive; good quality. Large, round, late purple plum. Especially recommended for late market.
- Red June.** Japanese origin. Prof. Bailey says: "By all odds the best Japanese Plum"; ripening before Abundance, fruit good size, brilliant red, finest extra-early plum.
- Wickson.** Color, glowing crimson, with white bloom; sugary and delicious.

CATAWBA-CONCORD (New)—Natural Size

QUINCES

Strong selected trees, 50 cts. each; \$5 per doz.;
\$35 per 100.

Orange. Large; bright golden yellow. One of the best.

Pineapple. New, clear yellow, mild pineapple flavor; will cook in five minutes.

Rea. We consider this the best of all the quinces. The largest and in every respect the finest variety of the quince.

GRAPES

The vine comes quickly into bearing, yielding fruit usually the second year after planting; requires but little space, and properly trained, is an ornament to the yard, garden or vineyard. The soil for the grape should be thoroughly drained, deeply worked and well manured, always bearing in mind that an essential point is to secure warm, sunny exposure.

The best grape-vine trellis is probably the wire trellis, with four wires, 18 inches apart. Pruning should be so done that each year two or three of last year's branches shall alone be left, at the spurs of which the present year's growth may start.

During the season when the shoots have reached the upper part of the trellis, they may be pinched

to prevent further growth. The following spring the canes should be cut back to the buds. Allow but one bud to throw out a shoot, and treat as in the previous year. This system of pruning should be followed each year.

Prices for strong, 2-year Grape vines, except as otherwise noted, 25 cts. each; \$2.50 per doz.; \$15 per 100.

CLASS I—BLACK GRAPES

Campbell (Early). The wonderful new seedling. Vines healthy, hardy, vigorous and a profuse bearer, bunch and berry large and handsome, quality A 1; ripens with Moore's Early, but keeps either on the vine or in the house for weeks after Moore's Early has decayed and gone. 35 cts. each; \$3.50 per doz.

Concord. A large, handsome grape, ripening a week or two earlier than Isabella; very hardy and productive. Succeeds over a great extent of country, and, although not of the highest quality is one of the most popular market grapes.

Moore. Bunch large, berry round, color black, with a heavy blue bloom; quality better than the Concord. Vine hardy, has never been covered in winter, and exposed to a temperature of 20 deg. below zero without injury, entirely exempt from mildew or disease. Its earliness makes it desirable for an early crop, maturing as it does 20 days before the Concord.

Worden. Said to be a seedling of the Concord. Bunch large, compact, handsome; berries large—larger than those of the Concord. It ripens a few days earlier and is superior to it in flavor. Very popular for vineyard and garden.

CLASS II—RED GRAPES

Brighton. Our experience with the vine and fruit of the Brighton has convinced us of its superiority as a family grape. Its remarkable vigor and hardiness of vine, large, compact bunches, rich wine shade of the ripened berry, delicate skin; tender, almost seedless pulp, sugary juice and rich flavor are combined qualities that are not united in such a degree in any other sort with which we are acquainted. It ripens a week or ten days before the Delaware.

Catawba. Well known as the great wine grape. Bunches large, loose; berries large, of a coppery red color, becoming purplish when ripe.

Catawba-Concord. A union of the grand old Catawba and the ever popular Concord; a cross between the Catawba and Concord, scientifically made and possesses the merits of both varieties with the defects of neither. Catawba-Concord is of the highest quality—equaling in tenderness of pulp, sweet luscious flavor and aroma the Catawba with added sweetness and juiciness; color rich sparkling light red; with abundant bloom. Strong vines, 50 cts. each; \$4 per doz., \$25 per 100.

Delaware. One of the finest grapes. Bunches small, compact, shouldered; berries rather small, round; skin thin, light red; flesh juicy, with an exceedingly sweet and delicious flavor. Ripens two weeks before Isabella.

Lucile. The wonderful new grape for the North. Hardy, healthy and early. A strong, robust grower and ripens its wood to the tip under a load of fruit, of which the Niagara would not ripen one-half. Quality, sweet and delicious;

RED GRAPES (Continued)

color, dark, rich red. Its crowning glory is its size and compactness of its clusters which resemble those of Diamond but are larger. An indispensable grape at the extreme North, where only early and extra hardy varieties can succeed. 50 cts. each; \$4 per doz.; \$25 per 100.

The State Agricultural Experimental Station at Geneva, N. Y., says: "Lucile is of interest and value because of its truly remarkable vine characteristics. In vigor, health, hardiness and productiveness it is not surpassed by any of the cultivated native grapes. With all of its great growth Lucile ripens its wood almost perfectly. It is very productive, as much so as any other of our native grapes, often bearing four bunches to the shoot, its crop exceeding those of Concord. It has never been known to winterkill in the grape region of New York. Its fruit and foliage are very nearly immune to the fungal diseases of the grape."

Wyoming. An extra-early red grape, resembling the Delaware in appearance, but double in size and ten days earlier. Bunch compact and handsome; berry medium bright red; skin thin and firm; flesh sweet.

CLASS III—WHITE GRAPES

Diamond. A vigorous grower, with dark, healthy foliage, entirely free from mildew. A prolific bearer, bunches large, handsome and compact, slightly shouldered; color delicate, greenish white, with rich yellow tinge when fully ripe. Skin smooth, pulp tender, juicy, nearly transparent, with few seeds; quality best, rich, sprightly and sweet. Ripens a few days before Concord.

Green Mountain (Winchell). New. Found growing in a garden on the side of the Green Mountains in Vermont, at an altitude of 1400 feet, where it ripened its fruit perfectly. Vine strong, vigorous, healthy, very hardy and productive. Bunch long, compact, shouldered. Color greenish white; skin thin; pulp exceedingly tender and sweet. Very early, being three weeks earlier than Concord. 35 cts. each; \$3 per doz.

Martha. Bunches and berries of medium size; greenish white, with a thin bloom; flesh tender, very little pulp, juicy, sweet and rich. Ripens about with Concord.

Niagara. The vine is a strong grower and very hardy. Bunches very large and uniform and very compact; berries larger than Concord, quality good, very little pulp, melting and sweet to the center. Ripens before Concord.

CURRANTS

Ripe just before raspberries are gone, and continuing in prime order for several weeks, there is no more useful fruit than the currant, and it is among the earliest to cultivate. Plant in rows 4 feet apart each way, if practicable. Light and air will do as much to enhance the value of currant bushes as with other plants. Keep the ground mellow, free from weeds, and in a good state of fertility, and prune freely every spring. Should the currant worm appear dust a little white hellebore powder, from a small coarse bag, over the bushes when the leaves are damp. In some instances it may be necessary to repeat this process, but the trouble and expense of exterminating the worms are trifling, if the powder is applied as soon as the worms appear.

Prices for Currants, strong transplants, except as otherwise noted, \$1.25 per doz.; \$10 per 100.

COMET CURRANT (Red)—Quarter Actual Size

Black Champion. A new variety from England; the finest black currant; abundant bearer. Berry large and fine.

Comet. New. Claimed to be far ahead in all respects of all other red currants in the market. It received an award of merit from the Fruit Committee of the Royal Horticultural Society of England as being a superior new variety, which was confirmed later on, when shown again. Bunch long, frequently 8 inches in length, with from 20 to 26 berries of enormous size (like grapes) and of brilliant color. Quality good, refreshing and soft to the palate without acidity. It hangs well on the bush. Its growth is abnormally vigorous and satisfactory. 25 cts. each; \$2.50 per doz.; \$20 per 100.

Cherry. Very large; deep red; rather acid; bunches short. Plants erect, stout, vigorous and productive.

Fay's Prolific. Originated in Chautauqua County, N. Y. A cross between Cherry and Victoria. Of large size, fine flavor and claimed to be twice as prolific as the Cherry. Universally commended by those who have seen or had experience with it.

White Grape. Very large; yellowish white; sweet, or very mild acid; excellent quality and valuable for the table. The finest of the white sorts. Very distinct from White Dutch, having low, spreading habit and dark green foliage; very productive.

Perfection. A fine new currant, obtained by crossing Fay's Prolific with White Grape. Berry larger than Fay's, clusters averaging longer; color a beautiful bright red, flavor rich, mild, sub-acid. A great bearer. Was awarded the

GLEN BROTHERS

CURRENTS (Continued)

Gold Medal at the World's Fair. 25 cts. each; \$2.50 per doz.; \$18 per 100.

Wilder. A remarkable new variety for which we predict a great future, both for table and market; strong grower, enormously productive; bunch and berry very large, bright red and of highest sub-acid quality, making it unequalled for the table, cooking or market.

GOOSEBERRIES

This fruit is so useful for cooking when green or ripe, and it may be canned with such facility, that it is beginning to be cultivated very extensively, for both home and market use. It requires the same cultivation, and treatment for worms as the currant. The American varieties, though not quite so large as the English, are of fine quality, and, unlike the latter, are not subject to mildew.

Prices—English varieties, except as otherwise noted, 25 cts. each; \$2.50 per doz. American, \$2 per doz.; \$15 per 100.

ENGLISH VARIETIES (Large Fruited)

Industry. An English variety; quite as free from mildew as our American sorts; very fine in quality; large size. Handsome, showy red fruit; wonderfully productive.

Victoria. New. We guarantee it to be far superior to any other gooseberry. The berries are larger than Industry, and are 7 to 10 days earlier. It bears marvelous crops. Last season we picked, from a Victoria bush, three years old, 28½ pounds of fine, large fruit. Never mildews. A rapid grower, making shoots 3 feet, 9 inches in a season. We cannot recommend it too highly. 50 cts. each; \$4 per doz.; \$25 per 100.

AMERICAN VARIETIES

Columbus. This is one of the most valuable introductions of recent years in small fruits, and it fully sustains the high opinion first formed of it. The fruit is of largest size; handsome; greenish-yellow color; excellent quality. The plant is vigorous and productive and does not mildew. It merits a place in every garden.

Downing. Fruit larger than Houghton; roundish; light green, with distinct veins; skin smooth; flesh rather soft, juicy and very good. Vigorous and productive.

Red Jacket. An American seedling of large size; smooth, prolific and hardy, of best quality. Has been well tested over a wide extent of territory by the side of all leading varieties. A wonderful cropper, with bright, healthy foliage.

VICTORIA GOOSEBERRY—Quarter Actual Size.

RASPBERRIES

Coming immediately after strawberries, when there is a dearth of other fresh fruits, raspberries are equally desirable for planting in the garden for home use, and in the field for market. They are very easily cultivated. Beds seldom require renewing. Their season of ripening is long. The fruit bears transportation well, and aside from the demand for it for immediate consumption, it brings highly remunerative prices for drying and canning.

Plant in good soil and manure from time to time freely. The hills should not be less than four feet apart each way, with two or three plants in a hill. Cut out the old and weak shoots each year, preserving not over six for fruiting. If the location is so much exposed that the plants are inclined to kill down seriously, they may be bent over in the fall, on mounds of earth formed at one side of the hills and covered sufficiently to keep them down until spring. Surplus suckers take strength from the bearing plants. They should be cut away or hoed up frequently.

Prices, strong plants, except as otherwise noted, \$1 per doz.; \$5 per 100.

RED AND YELLOW VARIETIES

Columbian. A most vigorous grower; canes 10 to 16 feet in length. Roots deep; hardy. Fruit very large, somewhat conical; color, dark red; seed small; delicious; very valuable for both canning and table use. Fruiting season unusually long. July 12 to August 15. An excellent shipper. Wonderfully productive.

Cuthbert (*Queen of the Market*). Large, conical; deep, rich crimson; firm; of excellent quality. A vigorous grower, entirely hardy and immensely productive.

Golden Queen. Rich golden yellow. The flavor is the highest quality. In size equal to Cuthbert; immensely productive; a very strong grower and hardy enough even for extreme northern latitudes.

Herbert—The Great Commercial Raspberry. Peer of All American Varieties. Origin, Ottawa, Can. Its hardiness is unquestioned, growing vigorously and producing heavy crops as far north as Hudson Bay. But its preeminent qualities are its large size—larger than any other variety—its magnificent appearance and delicious flavor.

THE NEW YORK EXPERIMENTAL STATION says: "The merits of Herbert are: Great vigor and hardiness, being rather hardier than the well-known Cuthbert; comparatively few suckers; and, most valuable of all, tremendous productivity, being nearly twice as productive as the old standard, Cuthbert. The season is about that of Cuthbert, but usually continues a few days longer."

It is almost impossible to find a description of its flavor—in which most of our customers will be interested. But it is safe to say the Herbert surpasses all others with its delicious melting flesh, full of rich creamy juice with a delicate wild taste all its own.

We offer heavy two-year-old plants: \$1.50 per doz.; \$10 per 100; \$50 per 1,000.

Marlboro. The best early red raspberry for the North, ripening soon after the Hansell. Hardy and productive.

THE NEW EVERBEARING RASPBERRY

RANERE. The heaviest cropping everbearing raspberry known.

GLENWOOD NURSERY

Bears the first year planted, producing its first fruit in June and continuing to produce quantities of bright crimson, luscious berries all summer until frosts. Rich, sugary, with full raspberry flavor; they are of exceedingly meaty, firm texture, and keep in good condition longer after being gathered than any other raspberry.

RANERE is the earliest of all raspberries, beginning to ripen in Northern New York June 10, just as the strawberry crop is waning. It is wonderfully prolific, the first or main crop being far greater than that of any other red variety known, equaling the most prolific black cap or purple cane sort; it gives a good crop of fruit all summer and autumn, fruiting on the old canes in generous quantities until late in August. By this date berries begin to ripen upon the young or current year's canes, which continue to produce berries in increasing numbers until late autumn.

Strong plants, \$1 per doz.; \$7.50 per 100;
\$50 per 1000.

St. Regis Everbearing. It is of pure American blood and of fine quality and hardihood. The canes enduring the severest cold uninjured. *Plants of St. Regis planted in the early April gave ripe berries on the 20th of June of the same year. For four weeks thereafter, the yield was heavy and the canes continued to produce ripe fruit freely without intermission until the middle of October.* The berries are large bright crimson color, firm, and full flavor to the very last.

Dr. W. E. Walsh, Mayor of Morris, Ill., wrote October 24th, that he was still picking St. Regis and getting 75 cts. per quart, in Chicago.

(Dr. Walsh's planting to date totals 16,500 St. Regis and Ranere plants supplied by us.)

Awarded a Certificate of Merit by the American Institute of New York.

\$1 per doz.; \$7.50 per 100; \$50 per 1000.

BLACK RASPBERRIES

Cumberland. Largest black raspberry known; bush perfectly hardy, very productive; fruit larger than any other sort, quality unsurpassed. The great firmness of the berry makes it a splendid shipper; ripens just before the Gregg; a mid-season variety. A very great acquisition.

Gregg. Of good size, and fine quality; very productive and hardy. It takes the same position among the blackcaps as Cuthbert among the red sorts.

Munger. The fruit resembles the Gregg, but larger. It is a better flavored berry than Gregg, tougher in texture and a better shipper. Extra fine for canning and evaporating. In dry season when most others are dry and seedy, Munger ripens up sweet and juicy. The canes are free from disease, upright in growth.

BLACKBERRIES

Plant on good land, moderately manured. Rows seven feet apart, three feet in the rows for field; prune as with raspberries. Form a hedge or tie to wire. Cultivate shallow.

Prices, except as otherwise noted, strong plants,
\$1 per doz.; \$5 per 100.

Early Harvest. A new variety of great promise, being exceedingly early in time of ripening and always reliable. The canes are strong and upright in growth, branching stout and vigorous. An enormous bearer. Berries sweet and of the highest quality.

RANERE EVERBEARING RASPBERRY

SWORN STATEMENT OF GEO. W. SWANK.

During the season of 1912 from one and one-quarter acres of the new Everbearing Ranere Red Raspberry, I, George W. Swank, harvested and sold 15,502 pints of berries for \$962.42.

The undersigned, George W. Swank, being duly sworn according to law, doth depose and say that the foregoing statements are correct and true.

GEORGE W. SWANK.

Sworn to and subscribed before me
this 20th day of February, A. D. 1913.

WILBER R. TILTON, Notary Public.

FLOWERS BLACKBERRY—Quarter Natural Size

BLACKBERRIES (Continued)

Blowers. For twenty-five years we have been looking for this kind of a blackberry. The berries are extremely large, averaging one inch in diameter and $1\frac{1}{4}$ to $1\frac{1}{2}$ inches long. It is exceedingly sweet with no perceptible core, the flavor delightful without any peculiarities. Its growth is phenomenal, many of the canes reaching 14 feet. Perfectly hardy and a first-class shipper. Record for 1909 from 31,570 square feet, or less than $\frac{3}{4}$ of an acre, was picked 112 bushels of fruit; sold at \$4.80 per bushel, at the rate of \$744 per acre. Strong plants, \$1.50 per doz.; \$10 per 100.

Mersereau. Originated in northwestern New York, where the mercury falls from 15 to 25 degrees below zero. The canes are exceedingly strong, upright habit, attaining upon fairly good soil, a height of 8 feet. The berries are a brilliant black, and remain black. Exceptionally sweet, rich, melting and luscious.

Snyder. Extremely hardy; enormously productive; medium size; no hard, sour core; half as many thorns as Lawton or Kittatinny.

ASPARAGUS

Do not permit another planting season to pass without a bed of this most delicious and highly prized table delicacy. Easily had by every owner of a bit of land, and once established lasts a generation.

The plants may be set in the fall or early spring. Prepare a plot of fine loamy soil, to which has been added a liberal dressing of good manure. Select two-year, or strong one-year plants; and for a garden, set in rows, 18 to 20 inches apart, with plants 10 to 12 inches in a row.

Make a small mound of the soil, over which the roots should be evenly spread so that the crowns, when covered, shall be three inches below the surface of the ground. If planted in the fall, the whole bed should be covered, before winter sets in, with 2 or 3 inches of coarse stable manure, which may be lightly forked in between the rows as soon as the ground is softened in the spring.

Prices: \$1 per 100; \$6 per 1000.

Columbian Mammoth White. In addition to the marvelous advantage of its white color, it is even more robust and vigorous in habit, and throws larger shoots and fully as many of them, as the Conover.

Conover. Very large and of excellent quality; has superseded the old varieties.

Giant. This is the old and well-known popular variety, tender and very rich.

Palmetto. A very early variety; even, regular size, of excellent quality.

RHUBARB, or PIE PLANT

Deep, rich moist soil is best, but it is such a strong, vigorous-growing plant it will thrive almost anywhere. Plant in rows 4 feet apart and the plants 3 feet apart. Set the roots so that the

ASPARAGUS

McKINLEY STRAWBERRY

RHUBARB, or PIE PLANT (Continued)

crowns are about an inch below the surface. Rhubarb is a gross feeder; the more manure it is given the larger and finer the yield.

Champagne (new). Surpasses all other varieties not only in flavor and delicate tenderness of its crimson stalks, but also in size. Actual weight of twelve stalks, eleven pounds and one ounce.

50c. each. \$3.00 per doz. \$20.00 per 100.

Myatt's Linnaeus. Early, very large, tender and delicately flavored; requires less sugar than other sorts.

\$1.25 per doz. \$5.00 per 100.

Victoria. This variety, if planted in a rich soil and properly cultivated, will produce tender stalks 3 feet long and from 1 to 2 inches in diameter.

\$1.25 per doz. \$5.00 per 100.

STRAWBERRIES

Prices: \$1.50 per 100; \$6 per 1000.

Cultural directions. Do not neglect even for an hour to immerse the plants in water as soon as received and bury the roots in fine, moist soil, in a shady place till ready to put them out.

EXTRA EARLY

Marshall. (S) Exceedingly handsome, high colored berry with extra fine quality.

Michel (S) Earliest. Fruit medium size, quality fine.

MIDSUMMER

Glen Mary. (S) Fruit beautiful light red, sweet and rich; very productive.

McKinley. (S) Large, firm, sweet; quality unsurpassed. We believe this the best strawberry grown.

Ryckerman. (S) Bears heavy crops of large-sized berries and is probably the sweetest and best flavored of all.

LATE

Aroma. (S) Best and most profitable late strawberry. Fruit very large and of excellent quality.

Brandywine. (S) Fruit excellent, conical form, dark glossy red, extending to the center.

Rough Rider. (S) Berries very large, round, deep red; delicious.

EVERBEARING STRAWBERRIES

\$1 per doz.; \$3 per 100; \$15 per 1000

What lingering doubts may have been felt as to the practical value of this new race of Strawberries are rapidly vanishing in the light of experience. There is now scarcely a discordant note in the general praise of their qualities for the home garden, and the developments of the past season indicate a greater value for the market garden than had before seemed probable. They have been on trial over a wide territory for about six years and their value clearly demonstrated.

Superb. (S) Considered the best of the fall bearing sorts. Cooper's introduction. Berry glossy, very attractive and of the finest flavor. Size of berry, very large and firm. Brings every blossom to maturity; no blanks, which is a strong point in a fall-bearing strawberry. Superb will yield as much fruit in the fall as the average spring-bearing varieties do in May, and will bear continuously from spring until checked by hard freezing.

Progressive. (S) Perfect health of foliage and this means bearing capacity. So hardy that uncovered plants generally come through winter in good condition. Exquisite flavor, far sweeter than standard varieties and affords good pickings a week before the first early varieties of the old kinds, continuing till November. Bears first season. Both the Iowa and Minnesota Horticultural Societies report Progressive was uniformly recommended.

Varieties marked (S) are "Staminate" and fertilize themselves.

GROUP OF DECIDUOUS TREES—VERY EFFECTIVE PLANTING

Ornamental Department

WHILE most people appreciate well-arranged and well-kept grounds, large or small, many fail to realize that they can have equally fine grounds. They have tried a few shrubs or roses, perhaps, growing in thick turf, with no attention given to pruning or cultivating. Under such circumstances good results cannot be expected. Aside from the pleasure of having fine trees, shrubs, vines and flowers in the grounds surrounding a home, few realize how much these add to the commercial value of a place. A purchaser having to decide between a house with bare, unkempt grounds, and one surrounded by fine ornamentals, invariably chooses the latter at a marked advance in price, because he sees that he will at once enjoy what it would otherwise take some years to secure. Sagacious men are led by a knowledge of these facts to plant fine trees and shrubs about vacant lots they are intending to put on the market. Lots thus planted readily secure purchasers at good prices, when bare grounds go begging.

DECIDUOUS TREES

SPECIAL PRICES ON LARGER QUANTITIES

ACER: MAPLE

ACER campestre (*English or Cork-bark Maple*).

A slow-growing, compact tree, with corky bark and handsome foliage. Forms a round head; very hardy and ornamental. 4-6 ft., \$1 each; \$9 per doz.

A. negundo (*Ash-leaved Maple*). A fine, rapid growing variety with handsome light green pinnated foliage and spreading head. Very hardy. 8-10 ft., 75 cts. each; \$7.50 per doz.

A. schwedleri (*Purple-leaved Norway*). A beautiful variety, with the young shoots and new leaves of a bright purplish and crimson color, which changes to purplish green in the older leaves. One of the most valuable trees of recent introduction. 6-8 ft., \$1.50 each; \$15 per doz.

A. wierii laciniatum (*Wier's Cut-leaved Silver Maple*). A silver maple with remarkable and beautiful dissected foliage. Of rapid growth; shoots slender and drooping, giving a very graceful appearance. While it makes a large tree if undisturbed, it will bear any amount of pruning and may be easily adapted to small lawns. 8-10 ft., \$1.50 each; \$15 per doz.

A. saccharinum (*Sugar or Rock*). The well-known native variety. Valuable both for the production of sugar and as an ornament in lining streets and avenues. A stately form and

fine, rich foliage render it justly popular as a shade tree. 6-8 ft., \$1 each; \$10 per doz.; 8-10 ft., \$2 each; \$20 per doz.

A. dasycarpum (*Silver-leaved*). One of the most ornamental of the species; the under surface of the leaves is a soft white. It is exceedingly rapid in its growth, often making shoots 6 feet long in a season. Valuable as a street tree. 8-10 ft., \$1 each; \$8 per doz.

A. platanoides (*Norway Maple*). A native of Europe. Its large, compact habit, broad, deep green, shining foliage and its vigorous growth render it one of the most desirable species for streets, parks and lawns. If given plenty of room it is one of the most magnificent trees for single planting. Its color in autumn is unequalled. 8-10 ft., \$1.50 each; \$15 per doz.; 10-12 ft., \$2 each; \$20 per doz.

A. pseudo-platanus purpurascens (*Purple-leaved Sycamore*). Strong, rapid grower; foliage deep green on the upper surface and purplish red underneath. Produces fine effect with other trees. 8-10 ft., \$1.50 each; \$15 per doz.

A. rubrum (*Scarlet, Red-bud or Red Swamp*). A beautiful native tree, with rounded head and of medium size. Its deep red blossoms appear before the foliage which in autumn changes to a bright scarlet. 4-5 ft., \$1 each; \$10 per doz.

GLENWOOD NURSERY

JAPANESE MAPLES

These grow slowly into dwarf, bushy, little trees with singular grace and beauty. The leaves are so delicately cut and beautifully colored that they are often grown for house decorations in jardinières, but being hardy and thrifty their greatest value is for outdoor beds or masses. Being among the most striking and showy of all the small trees they are particularly adapted for fine grounds. They grow best in partly shaded situations and in well-drained and rich soil.

ACER atropurpureum (*Blood-leaved Japan*). Of dwarf habit and rounded form; foliage five-lobed and serrated; reddish crimson in June. A charming variety and one of the best of the Japanese maples. 1½-2 ft., \$2.50 each.

A. dissectum atropurpureum (*Cut-leaved Purple*). One of the most striking and handsome varieties of the Japanese maples. Form, dwarf and weeping; the leaves are of a beautiful rose color when young, and change to deep and constant purple as they become older. They are also deeply and delicately cut, giving them an elegant fern-like appearance. 1½-2 ft., \$3 each.

A. polymorphum. Growth fast and shrubby; foliage small, five-lobed and of a bright, cheerful green in spring and summer, changing to a lovely dark crimson in autumn; perfectly hardy and one of the most beautiful and valuable of small sized trees. 3-4 ft., \$3 each.

A. p. aureum (*Golden Japan Maple*). Very similar to the other varieties in habit, with deeply cut but yellow foliage. 1½-2 ft., \$2 each.

AESCULUS hippocastanum (*White-flowering Horse Chestnut*). A very beautiful, well-known tree, with round, dense head, dark-green foliage, and an abundance of showy flowers in early spring. 6-8 ft., \$1 each; \$10 per doz.

AE. rubicunda (*Red-flowering*). Not so rapid or fine a grower as the white; foliage of a deep green and blooms later, with showy red flowers. 4-5 ft., \$2 each.

AE. alba flore pleno (*Double white-flowering*). The best of them all. The absence of fruit makes it a clean tree for the lawn. The flowers are double and larger than the common variety. 6-8 ft., \$2 each.

AILANTHUS glandulosa (*Tree of Heaven*). Of tropical appearance, with beautiful, feathery foliage, free from insects and diseases. A rapid grower. 8-10 ft., \$1.25 each.

AMELANCHIER botryapium (*Common Dwarf Juneberry or Shad-bush*). A native tree, producing a profusion of white flowers in April, followed by a small purple fruit which ripens in June. 3-4 ft., 50 cts. each; \$5 per doz.; \$25 per 100.

AN EFFECTIVE GROUPING OF JAPANESE MAPLES

GLEN BROTHERS

BETULA: BIRCHES

These are trees with the bark usually separating into fine papery plates. They are very ornamental and are especially valuable for their hardiness, thriving in the coldest climates. The foliage is entirely free from insects and turns to a bright orange and yellow in the fall. Their picturesque trunks and slender pendulous branches make them conspicuous features, beautiful to look upon at all seasons of the year. Loved by the birds more than any other tree, they are indispensable about the house. The birch prefers a moist, sandy and loamy soil.

BETULA alba (*European White Birch*). A handsome tree of moderate size, with silvery white bark and slender drooping branches. 7-8 ft., \$1 each; \$9 per doz.

B. a. pendula Youngi (*Young's Weeping Birch*). Grafted on stems, 5 to 6 feet high. The fine thread-like shoots droop to the ground, forming a novel and picturesque tree for the lawn. Requires but very little space. 4-5 ft., \$5 each.

B. alba pendula laciniata (*Cut-leaved Weeping Birch*). This tree is indeed a picture of delicacy and grace. It presents a combination of attractive characteristics of which no other variety can boast. Makes a large tree. 6-8 ft., \$1 each; \$9 per doz.; 8-10 ft., \$1.50 each; \$15 per doz.

B. lenta (*Sweet or Cherry Birch*). A native tree with high colored, aromatic twigs; a rapid grower. 6-8 ft., \$1 each.

B. papyrifera (*Paper or Canoe Birch*). Another native of America, with large, handsome leaves, clear white bark. Very ornamental and transplanted easily. 6-8 ft., \$1 each; \$9 per doz.; 8-10 ft., \$1.50 each; \$15 per doz.

THE CATALPAS

These trees are highly ornamental, with large, bright green and almost tropical-looking foliage and beautiful white or yellowish flowers in large panicles. They are rapid growers and thrive under almost any condition. The grafted trees always form symmetrical heads and are very desirable for lawn, park or cemetery planting. The wood of the *Speciosa* is grown extensively for fence posts and railway ties. They like a somewhat moist soil and are hardy as far north as New England.

CATALPA bungei (*Umbrella Catalpa*). Grafted on stems 6 to 8 feet high; it makes an umbrella shaped top without pruning. Perfectly hardy, and flourishes in almost all soils and climates. Leaves large, glossy, heart-shaped, deep green. One of the most unique trees; desirable for lawn, park and cemetery planting. 6-8 ft., \$1.50 each; \$15 per doz.

CATALPA BUNGEI

CATALPAS (Continued)

C. speciosa (*Hardy Western Catalpa*). A variety originating in the West; blossoms two or three weeks earlier than the native variety. Very valuable for timber, fence posts, railroad ties, etc., possessing wonderful durability. A very ornamental and valuable tree, 8-10 ft., \$1 each; \$9 per doz.; 6-8 ft., 75 cts. each; \$6 per doz.; \$30 per 100.

CELTIS occidentalis (*Nettle Tree, Hackberry*). A somewhat rare native tree with slender branches and rough, thick bark. 4-6 ft., \$1 each; \$8 per doz.

CERCIS canadensis (*Red Bud, or American Judas*). A small-growing tree, covered with delicate pink flowers before the leaves appear. Blooms in spring and is very ornamental. 5-6 ft., \$1 each.

C. japonica (*Japan Judas*). A great improvement on the well-known American Judas Tree. About the first of May it is covered with deep rose-colored flowers, a dozen or more in a bunch on the bare stem before the leaves appear. It has the trick of flowering from branches many years old, as well as from the new ones. 6-8 ft., \$1.50 each.

CERASUS (*Cherry*). See **Prunus**, page 28.

CHIONANTHUS virginica (*White Fringe*). Has handsome, large foliage and racemes of delicate white flowers that hang like finely cut shreds or fringes of white paper. Blossoms in May or June. 50 cts. each; \$5 per doz.

NOTE.—For Purple Fringe or Smoke Tree, see **Rhus**, page 29.

CORNUS florida (*White Dogwood*). A native, growing 15 to 20 feet high; blooms lavishly in spring before leaves appear; flowers white and very large. Its glossy green foliage turns to a deep red in autumn. Certainly one of the handsomest and most desirable of our smaller trees. Should be planted extensively. 3-4 ft., 75 cts. each; \$6 per doz.

C. florida rubra (*Red-flowering Dogwood*). Considered a great acquisition. Produces bright, red flowers; blooms when young; rare and beautiful. 2½-3 ft., \$1.50 each.

CYTISUS laburnum (*Golden Chain*). Bears long, pendant racemes of yellow flowers in June; showy and beautiful. Should be in every lawn. 4-6 ft., \$1 each.

FAGUS: BEECH

These are tall growing, hardy trees of noble appearance, with smooth, light gray bark and dark green foliage which is unusually free from insects or fungi. They are among the most desirable trees and are attractive at all seasons of the year, especially in spring. The foliage of the American varieties turns a clear yellow in the fall, while that of the European becomes a reddish brown, remaining throughout the winter. The beech prefers a somewhat dry situation and grows best in a sandy loam and limestone soil.

FAGUS ferruginea (*American Beech*). One of our finest native trees, beautiful anywhere. A large tree and should be on every lawn. Rich, shiny foliage, a symmetrical grower. 5-7 ft., \$1.50 each; \$15 per doz.

F. sylvatica (*European Beech*). A beautiful tree, growing to a height of 60 to 75 feet. 5-6 ft., \$1.25 each; \$12 per doz.

F. s. purpurea (*Purple or Copper Beech*). Discovered in a German forest. An elegant, vigorous tree, growing 40 to 50 feet high. Foliage deep purple, changing to crimson. Very ornamental. Like all varieties of the beech, this is difficult to transplant, hence small trees, 3 feet high, are preferable. 3-4 ft., \$1.50 each.

F. s. p. riversii (*River's Purple Beech*). Differs from the ordinary purple-leaved beech by its compact, symmetrical habit of growth and crimson foliage early in the spring, changing to a dark purple in summer. The finest of all purple-leaved trees. Grafted, 3-4 ft., \$2 each.

F. s. pendula (*Weeping Beech*). Of wonderful grace and beauty when covered with its rich, luxuriant foliage, but quite ungainly in appearance when divested of its leaves. Vigorous; grows to a height of 30 feet. 4-5 ft., \$3 each.

FRAXINUS: ASH

Hardy ornamental trees, valuable for street and park planting. Tall, growing rather pyramidal, with light green foliage, which turns yellow or dark purple in autumn. Are not easily injured and they will thrive in most soils.

PURPLE-LEAF BEECH (*Fagus-sylvatica purpurea*)

MAGNOLIA FLOWERS

FRAXINUS (Continued)

FRAXINUS americana (*White Ash*). A native tree of large size, rapid growth, and easy cultivation; leaves pinnate, pale green and handsome, changing in autumn to a mulberry tint. A very desirable tree, either for the avenue or lawn. 6-8 ft., \$1 each.

F. excelsior (*European Ash*). A tall growing, handsome tree, with very large leaves of a dark rich green, and which remain so till killed by frost. 6-8 ft., \$1 each.

F. excelsior pendula (*Weeping Ash*). A common well-known sort. One of the most desirable lawn and arbor trees, covering a large space and growing rapidly. 2-year heads, \$2 each.

GINKGO biloba (*Salisburia, Maidenhair Tree*). One of the most beautiful of lawn trees. Of medium size, rapid growth, and rich, glossy fern-like foliage. Of elegant habit, but it lacks density, hence it is not strictly speaking a shade tree. 6-8 ft., \$1.25 each.

GLEDITSCHIA triacanthos (*Honey Locust*). Large, spiny tree, with pendulous branches. Foliage dark green and glossy, fading into yellow in autumn. A hardy and ornamental tree, thriving in any soil. Planted closely and severely trimmed to formal lines, it makes an impenetrable hedge. 6-8 ft., 75 cts. each; \$6 per doz.; \$40 per 100. Hedge plants, 18-24 in., \$1 per 100; \$7.50 per 1000.

HALESIA diptera (*Silver Bell, Snowdrop Tree*). A hardy, small-sized tree, completely covered in May with a snowy mantle of white flowers before the foliage appears. Conspicuous and beautiful; should be planted about the home. 50 cts. each; \$5 per doz.

JUGLANS nigra (*Black Walnut*). See page 10.

KOELREUTERIA paniculata. A small Chinese tree, with foliage resembling that of the sumac. Purplish red on the new shoots and producing large panicles of golden flowers in July. Foliage brilliant in autumn. 4-5 ft., 75 cts. each.

LARIX (*Larch*). Deciduous conifers, admired for their soft, feathery, pine-like foliage which appears early in spring, and in autumn changes to yellow. They are rapid growers and it is best to use small or medium-sized trees. 75 cts. each; \$6 per doz.

L. americana (*American Larch Tamarack*). 50 cts. each; \$5. per doz.

L. decidua (*European Larch*). An excellent rapid-growing pyramidal tree; also valuable for timber. Small branches drooping gracefully 4-6 ft., \$1 each.

LIQUIDAMBAR styraciflua (*Sweet Gum*). A stately tree, with dark green, star-like leaves and cork bark. Its form is broad and pyramidal, and adapted for streets and avenues; its leaves in the spring emit a refreshing fragrance, and assume in autumn rich tints of yellow and red. 6-8 ft., \$1.50 each.

LIRIODENDRON tulipifera (*Tulip Tree*). A magnificent native tree with broad, glossy, fiddle-shaped leaves and beautiful tulip-like flowers. Allied to the magnolias which it equals in beauty, and, like them, difficult to transplant unless of small size. Desirable for park, lawn and avenue planting. 6-8 ft., \$1.25 each.

THE MAGNOLIAS

There are no trees more striking than these. The size and richness of the foliage and bountiful yield of fragrant flowers give them first place among hardy ornamental trees. In early spring, at which time they bloom, their beauty is beyond description. They not only light up the entire landscape, but fill the air with the richest perfume. Being somewhat difficult to transplant, small trees, 3 to 4 feet high, are preferable.

MAGNOLIA obovata (*Purple Magnolia*). Small growing tree. Flowers purple and pink. \$2 each.

M. soulangeana. One of the hardiest, best and most satisfactory species, forming a large bushy tree, 20 feet high by 20 feet in diameter. A well-grown plant in full bloom from top of its tallest twig to the lower branches which sweep the ground, with tens of thousands of large, delightfully fragrant flowers, rosy pink in bud but pure white when fully expanded, forms a gigantic bouquet which no other tree can surpass for showiness. \$2.50 each.

M. lennei. Recently introduced. Foliage large; flowers purplish crimson or magenta, and although not a handsome grower, a superb variety. \$3 each.

M. speciosa (*Showy-flowering Magnolia*). A good grower; tree generally round-headed and of fine form; flowers are a little smaller, and

MOUNTAIN ASH, SHOWING
CLUSTERS OF SCARLET BERRIES
(See *Sorbus*, Page 30)

MAGNOLIAS (Continued)

of a lighter color than those of *Soulangeana*, and produced in wonderful profusion. This is one of the best varieties. \$2 each.

Magnolia acuminata (*Cucumber Tree*). A beautiful pyramidal-growing native species, growing to the height of 60 or 70 feet, with large glossy leaves; flowers yellow, tinted white bluish purple. \$1 each.

M. tripetala (*Umbrella Tree*). Of medium size with immense leaves, and white flowers nearly 6 inches across. Flowers in June. Entirely hardy and vigorous. \$2.50 each.

MORUS alba tartarica (*Russian Mulberry*). A hardy rapid-growing tree; foliage abundant. Fruit of no value, but birds love it. 50 cts. each.

M. downingii (*Downing Everbearing Mulberry*). The beauty of this as a lawn or street tree is quite enough to commend it; but in addition it yields an abundant supply of its large refreshing berries for about three months. 50 cts. each.

M. a. pendula (*Teas Weeping Mulberry*). One of the finest, most graceful and satisfactory weeping trees, forming an umbrella-shaped head, with slender, willow branches drooping to the ground. It has beautiful, glossy foliage, handsomely cut or divided into lobes. It is perfectly hardy. \$1.50 each.

NYASSA multiflora (*Tupelo, or Sour Gum*). Of medium size and a moderate grower; leaves small, shiny, green, turning to bright crimson in autumn. \$1 each.

OXYDENDRUM arboreum (*Sorrel Tree; Syn., Andromeda arborea*). A beautiful, medium-sized flowering tree, with small white flowers, borne in great profusion. Its foliage assumes the brightest shades of scarlet and crimson in autumn. 4-5 ft., \$2.50 each.

PLATANUS orientalis (*Oriental Plane, Eastern Buttonwood*). This tree is fast becoming popular for street planting. Few trees thrive as does this variety under adverse conditions and where the air is filled continually with coal smoke. Free from insects and almost as rapid a grower as the Carolina Poplar, but, unlike the Poplar, has a clean habit of growth with beautiful dense foliage, is longer lived and holds its leaves late in autumn. 6-8 ft., \$1.25 each; \$12 per doz.

POPULUS:

THE POPLARS OR ASPENS

Easiest of all the trees to grow and the cheapest. Much used for temporary effect. Their rapid growth gives shade long before most trees get fairly started. The Lombardy is the most striking. All of them will thrive under the most unfavorable conditions.

POPULUS alba (*Silver-leaf Poplar*). A tree of rapid growth and spreading habit; leaves large lobed, dark, rich green above, and white as snow beneath; succeeds anywhere. 6-8 ft., 75 cts. each.

P. a. bolleana. An upright, compact grower, similar to Lombardy; leaves glossy green above and silvery beneath. Best of the poplars. 8-10 ft., \$1 each.

P. balsamifera (*Balsam Poplar, Balm of Gilead*). In habit more spreading than Carolina. Both of these varieties are valuable where shade is wanted as soon as possible, as they are of most rapid growth. 8-10 ft., \$1.50 each.

P. nigra italica (*Lombardy Poplar*). Well-known for its erect, rapid growth and commanding form. Very desirable in large grounds and along roads to break the average height and forms of other trees. 8-10 ft., 50 cts. each; \$5 per doz.; \$30 per 100.

P. deltoides carolinensis (*Carolina Poplar*). A very rapid grower, of erect habit, for this reason planted extensively. 8-10 ft., 50 cts. each; \$4 per doz.; \$25 per 100.

OAKS (*Quercus*)

"Tall oaks from little acorns grow."

PRUNUS: FLOWERING PLUM CHERRY, PEACH AND ALMOND

There are more than fifty varieties of these pink or white flowered shrubs and small growing trees. Some of them have foliage of various colors and all of them are desirable for massing or specimen planting.

PRUNUS avium plena (*Double-flowering Cherry*).

A tree of medium growth, producing clusters of flowers in May so profusely as to completely hide the branches from view. \$1 each.

P. cereasifera atropurpurea (*Pissard's Purple-leaved Plum*; Syn., *P. Pissardi*). Small but exceedingly ornamental tree of compact habit. The young trees are crimson, changing to dark purple, and retaining this hue throughout the season better than most other purple-foliaged plants. 50 cts. each.

P. japonica (*Double-flowering Almond*; Syn., *Amygdalis communis* and *A. pumila*). A low bush; one of the most beautiful early summer-bloomers, with flowers double, rose color and white, borne in great profusion. 25 cts each.

P. padus (*European Bird Cherry*; Syn., *Cerasus Padus*). A particularly neat and symmetrical tree, with clean, bright, green foliage. Its graceful drooping spikes of white flowers are borne in great profusion. 6-8 ft., \$1 each.

P. pendula (*Japanese Weeping Rose-flowered Cherry*). A rare tree of irregular form with drooping branches. One of the handsomest early flowering weeping trees, bearing small pink flowers in great profusion. \$2 each.

P. persica plena (*Double-flowering Peach*; Syn., *Persica vulgaris plena*). A peach tree in full bloom, with large double flowers, is a charming sight, unequalled by anything else which blossoms at the same time. 75 cts. each.

P. triloba (*Flowering Plum*). A beautiful shrub with slender branches densely clothed with elegant double rosy flowers in early summer. 50 cts. each.

PTELEA trifoliata (*Hop Tree*). A low shrubby tree that bears clusters of fruit resembling hops; interesting. 50 cts. each.

P. t. aurea (*Golden Hop Tree*). In sunny exposure the glossy leaves are lemon-yellow, retaining their bright color all summer. Useful for producing contrast and color-effect in large shrubberies. 75 cts. each.

PYRUS ioensis plena (*Bechtel's Double-flowering Crab*). A sturdy grower, hardy and of medium size. Flowers are double and resemble delicate pink roses, and are very fragrant. When in bloom looks like a mammoth rose bush. Blooms young. 75 cts. each.

P. floribunda parkmani (*Parkman's Japan Crab*). In spring when covered with small carmine buds dangling on slender stems, changing to a delicate pink when flowers are open, it forms a lawn specimen of rare beauty. 75 cts. each.

QUERCUS: THE OAKS

Nearly all of the oaks are stately trees of majestic habit, with wide spreading branches, often covering a diameter of more than a hundred feet. The foliage is always beautiful, showing handsome pink and crimson coloring when unfolding; turning to brilliant shades in autumn. Their hardiness, strength and solidity have made the expression, "As hardy as an Oak," a very common one. They are among the most valuable for park and street planting.

PIN OAK (*Quercus palustris*). (See Page 20).

WEeping WILLOWS (*Salix Babylonica*). WILLOW POND, EAST AVENUE, ROCHESTER. N. Y.

QUERCUS (Continued)

Q. alba (*White Oak*). Large size and spreading branches; leaves lobed, pale green above and glaucous beneath. 6-8 ft., \$2 each.

Q. cerris (*Turkey Oak*). A rapid, symmetrical grower; finely lobed and deeply cut foliage; leaves change to brown in fall; a fine lawn tree. \$1.50 each.

Q. coccinea (*Scarlet Oak*). A rapid pyramidal grower; foliage changing to bright scarlet in fall. \$1 each.

Q. macrocarpa (*Mossy-Cup, Bur Oak*). Spreading form, deeply lobed foliage, cup bearing, acorn fringed and bur-like; bark corky. One of the noblest of the family. 6-8 ft., \$1.50 each.

Q. palustris (*Pin Oak*). The pin oak is undoubtedly the most valuable variety for all practical purposes. The foliage is dense, finely divided, of a beautiful shining green that colors to sparkling red and yellow in fall. The tree is easily transplanted, and grows well on wet or dry ground; is, in fact, the quickest growing of all the oaks. As an avenue and street tree it is unequalled, and is one of the best for park planting. 4-6 ft., \$1 each; \$10 per doz.; 8-10 ft., \$2 each; \$18 per doz.

Q. rubra (*Red Oak*). Large size and rapid growth; purplish-red foliage in fall. \$1.50 each.

RHAMNUS caroliniana (*Southern Buckthorn*). A thornless shrub, with greenish flowers and black berries in fall. 50 cts. each.

RHUS continus (*Purple Fringe, Smoke Tree*). A small tree or shrub very much admired on account of its peculiar fringe, or hair-like flowers, covering the whole surface of the bush in

midsummer. It grows 12 to 15 feet high and should be allowed plenty of room to spread. 50 cts. each.

R. glabra (*Sumac*). Excellent foliage, topped in fall with prominent crimson beads of seed. Fine autumn coloring. 50 cts. each.

SALIX: THE WILLOWS

The willow plays a prominent part in the temperate regions of the United States. Easy to transplant, strong, rapid growers, make them very desirable for many situations. The above illustration shows a very happy and effective use of the Willow Babylonica. They never require any particular attention and succeed well in rather dry soils. They are also desirable for planting along streams, to prevent banks from washing. The bright yellow catkins in spring are attractive, while the red and yellow branches of some varieties are very handsome in winter.

SALIX vitellina aurea (*Golden Willow*). Very conspicuous on account of its yellow bark. 4-5 ft., \$1 each.

S. v. britzensis (*Crimson Willow*). Red bark in winter renders it very attractive. 5-6 ft., \$1 each.

S. babylonica (*Weeping Willow*). Our common and well-known weeping variety. 6-8 ft., 75 cts. each.

S. b. dolorosa (*Wisconsin Weeping Willow*). Extremely hardy and of drooping habit. 6-8 ft., 75 cts. each; \$7.50 per doz.

S. caprea (*Goat, Pussy Willow*). A medium-sized tree that flowers in early spring. 50 cts. each.

SALIX (Continued)

- S. c. pendula** (*Kilmarnock Weeping Willow*). A distinct variety, having reddish roots and large, glossy foliage; grafted at a proper height, about five feet from the ground, it makes a very desirable small lawn tree, having a perfect umbrella-shaped head, and with the branches drooping gracefully to the ground; is well suited for planting in cemetery lots or other small enclosures. 75 cts. each.
- S. pentandra** (*Laurel-leaved Willow*). A fine tree, with large, shiny leaves; valuable for sea-shore planting. 6-8 ft., \$1 each.
- S. rosmarinifolia**, or **petiolaris** (*Rosemary-leaved*). Branches feathery, with small silvery foliage; make a strikingly pretty, small-sized tree when grafted standard high. It should always find a place in every yard, and will produce a pleasing effect. \$1.50 each.

SORBUS: THE MOUNTAIN ASH

(See illustration, page 27)

Thoroughly hardy and very ornamental trees, with handsome foliage and showy red fruit. All bird lovers should plant a few trees about the home as birds are great lovers of the red fruit.

SORBUS pyrus pendula (*Weeping Mountain Ash*). A rapid grower of pronounced pendulous and trailing habit; a desirable lawn tree. \$1.50 each; \$15 per doz.

Var. quercifolia (*Oak-leaved Mountain Ash*). A very distinct and desirable tree, with compact, pyramidal head and dark-lobed leaves, downy underneath; producing the same flowers and berries as European. Very hardy and desirable for planting on lawns or in dooryards. 5-6 ft., \$1 each; \$9 per doz.

TILIA: THE LINDENS or BASSWOODS

Rapid growers, making themselves at home in almost any soil. They are planted extensively for ornamental purposes. They bloom abundantly, the flower being rich in nectar. No other tree or plant excels it for the production of honey.

TILIA americana (*American Linden, Basswood*). A rapid-growing, open head or spreading tree, with large leaves and fragrant flowers. Very desirable on account of its fine luxuriant foliage. 8-10 ft., \$1.50 each.

T. pendula (*Weeping Silver Linden*). Large foliage; slender, drooping shoots. Very desirable. \$1.50 each.

T. vulgaris (*European Linden*). A very fine pyramidal tree, with large leaves and fragrant flowers; smaller in all parts than the American, and more valuable for street and lawn planting. 8-10 ft., \$1.50 each.

ULMUS: THE ELMS

Of habit, graceful and majestic. It has no superior for street planting or for shade about dwellings. The wide spreading head high up at the top of a straight, shapely trunk makes it a superb feature of the landscape. Long lived, they grow best in a rich and fairly moist soil.

ULMUS americana (*American White Elm*). A native tree of large size, with open, spreading head, and graceful, drooping branches. Very popular in nearly all sections, and valuable for street planting. Succeeds admirably even where the soil is somewhat heavy and damp. 8-10 ft., \$1.50 each; \$15 per doz.; \$85 per 100.

U. campestris (*English Elm*). An erect tree of rapid, compact growth. Leaves are smaller and more regular cut than those of the American, and bark is darker. The branches project from the tree almost at right angles, thus giving it a noble appearance. \$1.50 each.

U. scabra (*Scotch Elm*). A fine spreading tree, of rapid growth and large foliage. \$1.50 each.

U. s. pendula (*Camperdown Weeping Elm*). One of the most graceful of all weeping trees, having large, luxuriant and deep green foliage; well adapted for planting on lawns and covering arbors; very desirable; a rapid grower. \$1.50 each.

NORWAY MAPLE (See Page 22)

CONES OF PINUS STROBUS (2 TO 4 IN LONG.) (See Page 34)

Cone-Bearers and Hardy Evergreens

It is only by the use of evergreens that permanent beauty every day in the year can be secured about our homes. Carrying as they do their beautiful, richly colored foliage through the winter, when the deciduous trees and shrubs are leafless, the wintry aspect of our surroundings is wonderfully brightened by their generous use. Every home builder, no matter how small the grounds, needs them. As screens, they not only provide privacy, but are indispensable for shelter and wind-breaks. Groups of marvelous beauty can easily be arranged by simply studying the following descriptions. Practically all the cone-bearers thrive best on loose sandy soils. While all evergreens require light and air, the yews, firs and hemlocks are the most tolerant of shade. We exercise great care in preparing them for shipping. All are dug with ball of earth, securely burlapped, which insures transplanting without shock. It must be remembered that width and symmetry are important factors in determining the value of evergreens, more so than their height; hence, we recommend moderate sizes.

The sap of most evergreens, being of a resinous nature, is not active in early spring as that of deciduous trees, and, as a rule, all evergreens and coniferous trees succeed better planted later in the spring and earlier in the autumn than deciduous trees. The latter part of April or during May, and the latter part of summer are the best times, in ordinary seasons. August planting is not recommended, however, unless the season be favorable.

ABIES: THE FIRS

The firs, also known as balsams, are most beautiful in cultivation. Deep green foliage, lustrous above and silvery white below, combined with their healing, balsamic perfume, make them necessities rather than luxuries. They are rapid growers, requiring a moist, well-drained soil. Although short lived, when compared with other varieties, they grow to large size and retain their native beauty for long periods.

ABIES balsamea (*Balsam Fir, Balm of Gilead*).

A rapid, slender pyramidal grower, with very dark foliage. Grows in cold, wet ground as well as in better soil. Its fragrance is sweet

and healing. Very hardy. 2-3 ft., \$2.50 each.

A. concolor. The finest of the Rocky Mountain evergreens. Of graceful habit; broad, handsome foliage, bluish above, silvery beneath. A grand tree, very distinct and exceedingly rare as yet. 2-3 ft., \$3 each.

A. nobilis, var. glauca (*Noble Silver Fir*). Foliage of pleasing silver blue, the young growth contrasting well with the deeper shades of the older. A magnificent tree. \$3 each.

A. nordmanniana (*Nordmann's Silver Fir*). This majestic fir is of symmetrical form, vigorous and quite hardy. Its foliage is massive, dark green, shining above; slightly glaucous below, rendering it a very handsome tree throughout the year. 2-3 ft., \$2.50 each. 3-4 ft., \$5 each.

GLEN BROTHERS

ABIES (Continued)

- A. picea** (*European Silver Fir*). A stately, hardy tree with rich, green foliage, silvery underneath. A faster grower than Nordmann's and less compact in habit. 2-3 ft., \$3 each.

CHAMAECYPARIS: THE RETINOSPORAS

Natives of Japan, many of which are still imported; they are perfectly hardy. The foliage is soft, feathery and lace-like. A most interesting class of evergreens, many of them being of dwarf habit and particularly adapted to small places. Their loveliness of coloring and their close symmetrical habit make them especially desirable for grouping. Planted in pots and tubs they are much used for winter decorations. In Japan, when grown in this way, it is said that they live for a century.

CHAMAECYPARIS lawsoniana (*Lawson's Cypress*). A most beautiful species. Branches thickly furnished with short, fern-like branchlets; foliage thick in texture, rich deep green color on the upper side, and a slightly glaucous tint underneath. \$2.50 each.

C. filicoides (*Fern-like Japan Cypress*). Is a very dense, bright green fern-like evergreen. One of the finest of the Retinospora family. \$4 each.

C. filifera (*Thread-branched Japan Cypress*). Pyramidal in form with bright green foliage. Particularly graceful on account of the ends of its shoots drooping in long filaments. Should be included in every evergreen collection. 2-3 ft., \$4 each.

C. leptoclada (*Thuja-like Japan Cypress*). Very compact, of pyramidal form, closely set, spreading feathery branches. Foliage glaucous green, silvery below. A most desirable ornamental tree. \$3 each.

C. obtusa nana (*Dwarf Retinospora*). Smallest of the Retinospora family, forming a bushy specimen; foliage dense and short, of extremely deep rich dark green color. Very good where a dwarf tree is required. 1-1½ ft., \$2.50 each.

C. o. n. aurea (*Golden Dwarf Retinospora*). Very similar to *R. obtusa nana*; foliage a rich bright yellow. Handsome and ornamental. 2-3 ft., \$5 each. 1½-2 ft., \$2.50 each.

C. pisifera (*Sawara Cypress*). Open grower; distinguished from *R. obtusa* by the feathery appearance of its foliage. Beautiful green foliage, very feathery. \$3 each.

C. p. aurea (*Golden Retinospora pisifera*). Resembles *R. pisifera* in habit; the whole of its foliage and young growth is of a rich golden yellow. Remarkably graceful and ornamental. 4-5 ft., \$4 each.

C. plumosa (*Plume Retinospora*). A dense, heavily branched tree, plume-like foliage of a soft green color; responds to pruning, and is par-

ticularly useful for hedges and bedding. \$2 each.

C. p. aurea (*Golden Plume Retinospora*). A distinct variation from *R. plumosa*, the shoots and younger foliage being of a light golden yellow. \$3 each.

C. squarrosa. Has a soft, steel-colored foliage which is very effective. The plant stands pruning, and can be kept to any height. 2-3 ft., \$2.50 each.

JUNIPERUS: THE JUNIPERS AND CEDARS

All are perfectly hardy except the Irish Juniper, which requires shelter. Their columnar growth,

GROUP OF RETINOSPORAS

combined with a variety of colorings makes them effective, both for specimens and group planting. Our native red cedar (*Juniperus Virginica*) is the largest and handsomest of them all when in cultivation, attaining a height of 100 feet. This variety is indispensable for parks and large private estates. The Junipers thrive best in sandy and loamy, moderately moist soil, but thrive even in somewhat dry, rocky, gravelly ground. They, however, prefer open situation with plenty of sun. They are well adapted and much used for hedges and for planting shelters or wind-breaks. Also valuable for seaside planting.

JUNIPERUS communis canadensis (*Canadian Juniper*). Native of China and Japan. A handsome, dense shrub with dark green foliage, and somewhat drooping branches. \$1.50 each.

J. c. aurea (*Douglas' Golden Dwarf Juniper*). Of mat-like growth, brilliant golden foliage; valuable for edging or grouping. 1-1½ ft., \$1.50 each.

J. c. suecica (*Swedish Juniper*). Similar to the Irish, though not so erect, with yellowish-green foliage of somewhat lighter color than the preceding, forming a beautiful pyramidal small tree. 2-3 ft., \$2 each.

J. c. hibernica (*Irish Juniper*). Very erect and tapering in its growth, forming a column of deep green foliage; a pretty little tree or shrub, and for its beauty and hardiness is a general favorite. 2-3 ft., \$1.50 each. 3-4 ft., \$2.50 each.

JUNIPERUS (Continued)

- JUNIPERUS sabina** (*Savin Juniper*). A low spreading tree, with handsome, dark green foliage; very hardy, and suitable for lawns and cemeteries; can be pruned to any desired shape and made very ornamental. 2-3 ft., \$2.50 each.
- J. s. prostrata** (*Prostrate Juniper*). A low spreading variety, trailing close to the ground. Foliage bright green, bronzy in winter. Fine for rock work or banks. \$1.50 each.
- J. virginiana** (*Red Cedar*). A well-known American tree; varies much in habit and color of foliage, some being quite stiff, regular and conical, and others loose and irregular. It makes a fine ornamental hedge plant. 2-3 ft., \$1.50 each; \$12 per doz. 3-4 ft., \$3.50 each; 5-6 ft., \$5 each.
- J. virginiana glauca** (*Blue Cedar*). Closely allied to the preceding, but a distinct variety. Its beautiful blue color makes it the most desirable of all the cedars. Perfectly hardy and transplants easily. Should be planted extensively. 2-3 ft., \$2 each; \$18 per doz.
- J. virginiana pyramidalis**. A very hardy, vigorous plant of dense columnar form, with silvery and light green foliage. One of the best for formal gardens. 4-5 ft., \$1.50 each.

PICEA: THE SPRUCES

This class embraces not only superb varieties for ornamental planting but some of the most useful of the conifer family. They are planted extensively when shelter and hedges are desired. Their beauty glistening in the sun or drooping with feathery snow must be seen to be appreciated. Long lived, of symmetrical habit, rapid growing, they are among the most valuable evergreens, giving intense satisfaction.

PICEA alba (*White Spruce*). A native tree of medium size, varying in height from 25 to 50 feet, of pyramidal form. Foliage silvery gray, and bark light colored. Very hardy and valuable, 3-4 ft., \$2 each.

P. bicolor (*Alcock's Spruce*). From Japan. Forms a beautiful tree of close habit. Foliage pale green, silvery underneath. 2-3 ft., \$3 each.

P. excelsa (*Norway Spruce*). Of large and lofty appearance. Well adapted for large enclosures and stands pruning well when used for hedges. It is exceedingly picturesque and beautiful. Very popular, and deservedly so. 1½-2 ft., 75 cts. each; \$6 per doz.; \$50 per 100; 2-3 ft., \$1 each; \$9 per doz.; \$75 per 100; 4-5 ft., \$3 each; \$30 per doz.

P. e. inverta (*Weeping Norway Spruce*). A pendulous variety of the Norway spruce. The lateral branches droop gracefully. \$5 each.

P. pungens var. kosteriana (*Koster's Colorado Blue Spruce*). A most beautiful variety discovered in and disseminated from the Rocky Mountains. It is the nearest blue of any evergreen; very distinct in foliage and growth; fine, compact habit. In great demand throughout the eastern states, where fine specimens are established, proving it the best of all evergreen trees for the lawn. Foliage rich blue or sage color.

Selected Specimens: Grafted	Each
1½-2 ft.....	\$2.50
2½-3 ft.....	5.00

Picea douglasii (*Douglas Spruce or Fir*). From Colorado. Large, conical form; spreading branches; horizontal; leaves light green above, glaucous below. 3-4 ft., \$3 each.

KOSTER'S COLORADO BLUE SPRUCE
(*Picea*, var. *Glauca*)

PINUS: THE PINES

"How comforting are their whisperings,
And the music of their tops how sweet!"

Towering and majestic, they are a prominent feature of the landscape in almost every country on the globe. The tall, stately growing varieties are much used for parks and large country places, while the smaller or dwarf varieties are adapted to the smallest lot. All pines must be transplanted when young, because of long tap-roots. They will thrive in the poorest and roughest of soils, and are invaluable for seashore planting. Being strong, rapid growers, they quickly attain a substantial appearance, which makes them invaluable for lawn and specimen planting.

PINUS laricio austriaca (*Austrian Pine*). A robust grower with long, dark, stiff needles. Does well on all soils and especially well for seashore planting. 2-3 ft., \$2 each; 4-5 ft., \$4 each.

P. cembra (*Swiss Stone Pine*). Thick, regular grower, foliage resembling White Pine, and quite silvery. 2-3 ft., \$3 each.

P. excelsa (*Bhotan or Himalayan Mountain Pine*). Similar to White Pine, but more silvery foliage, which is long and pendulous. Superb habit, very hardy. 2-3 ft., \$4 each.

P. montana mughus (*Mughu Pine*). Of low, dense, spreading growth, with very dark foliage; very hardy. Grows rapidly everywhere, becoming more beautiful each year. 1-1½ ft., \$1.50 each. 1½-2 ft., \$2.50 each; 2-3 ft., \$4 each.

P. strobus (*White Pine*). A native tree, valuable for timber purposes. Light, silvery foliage; used for hedges and can be clipped like a shrub. 2-3 ft., 75 cts. each; \$7.50 per doz.; \$60 per 100.

P. sylvestris (*Scotch Pine*). A dark, tall evergreen, with bluish foliage and rugged shoots. Hardy, and grows even on the poorest soils. 2-3 ft., \$2.50 each; \$25 per doz.

PINUS MUGHUS (*Dwarf pine*)

PYRAMIDAL ARBORVITAE (*Thuja occidentalis*)
(See Page 35)

SCIADOPITYS verticillata (*Umbrella Pine*). From Japan. One of the most beautiful and most popular evergreens. It has what evergreens rarely possess, hardiness. It is the only evergreen that will stand abuse and succeed. This, added to its great beauty, makes it very desirable. \$5 each.

SEQUOIA gigantea (*California Redwood*). Native of the Sierra Nevada Range of California. The climax of vegetation—the largest and oldest trees in the world. Early in the Christian Era the largest of the Big Trees, now standing, were swaying in the Pacific breezes. Trees three hundred or more feet tall, with trunks twenty or thirty feet in diameter, have been recorded. Foliage green or bluish green, completely clothing the branchlets. Cones 2 to 2½ inches long. This is the hardier species and the one most often seen in cultivation. A rare opportunity to secure Rochester grown trees. Specimens 2 ft., \$10 each.

TAXUS baccata (*English Yew*). Slow growing, with short stems and very bushy head, densely branched, thickly covered with drooping somber green leaves. \$2 each.

T. b. aurea (*Golden Yew*). One of the most valuable golden-leaved evergreens which we have. In June and July the leaves of the new growth are of a bright straw color, rendering the plant highly effective, either by itself or in connection with other conifers. One of the hardiest of the yews, and a most beautiful ornament on the lawn or in the shrubbery. \$3 each.

T. canadensis (*American Yew*). A low, weeping, broad, spreading bush, dark green foliage and crimson berries; very hardy and valuable for surfacing beds or forming groups. \$2 each.

THUYA: ARBORVITAE

Many of this group are so common that they miss our appreciation. They are bright greens, dark greens, yellowish greens, all changing in winter. These characteristics, combined with their various shapes, insure beautiful effects when planted in groups or along borders. Some varieties are used extensively for hedges and may be trimmed to any height. They grow in moist soils, are easily transplanted and always give satisfaction.

THUYA occidentalis (*American Arborvitae*). This is the finest evergreen for hedges. It is very hardy. Small plants, 12 to 18 inches high, which have been transplanted, are preferable. It bears shearing better than any other variety and may be made a very beautiful and dense hedge or screen to divide grounds, or for any purpose where it is not required to resist cattle or other animals. For hedging, \$3.50 per doz.; \$25 per 100; 2-3 ft., 75 cts. each; \$8 per doz.; \$60 per 100. Specimens, 4-5 ft., \$2.50 each.

T. o. lutea (*Geo. Peabody's Golden Arborvitae*). A dwarf, dense-growing, golden variety, holding its color all summer. 2-3 ft., \$2 each.

T. o. compacta (*Parson's Compact Arborvitae*). Forms a globe of light green foliage. 2-3 ft., \$2 each.

T. o. globosa (*Globe Arborvitae*). Grows in low, thick globe form. \$1 each.

T. o. hoveyi (*Hovey's Golden Arborvitae*). Of dwarf habit, globular outline and golden green foliage; fine and hardy. 2-3 ft., \$3 each.

T. o. rosdale hybrid. A small, compact bush with variable purplish and silvery tints combined in a striking manner. New, \$2 each.

T. o. pyramidalis. (*Pyramidal Arborvitae*). Of upright, compact habit, like Irish Juniper; foliage light green; very hardy. 2-3 ft., \$1.50 each.

T. o. Tom Thumb. Very dwarf and of slow growth; of compact, symmetrical habit; valuable where low-growing forms are needed; hardy; \$1.50 each.

T. o. warreana (*Siberian Arborvitae*). Of low-growing, dense form, with beautiful bluish-green foliage; very hardy; desirable for hedge. 2-3 ft., \$2.50 each.

T. orientalis aurea nana (*Golden Arborvitae*). A very dwarf, compact shrub, with golden yellow foliage. One of the best. 12-18 in., \$1.50 each; 18-24 in., \$2 each.

T. orientalis compacta (*Compact Oriental Arborvitae*). Low and very compact; bright green foliage. Very attractive. 2-2½ ft., \$2 each.

TSUGA canadensis (*Hemlock Spruce*). A remarkably graceful and beautiful tree, with drooping branches and delicate dark foliage, like that of the yew; distinct from all other trees; a handsome, exquisite lawn tree and makes a highly ornamental hedge. 2-3 ft., \$1.50 each; 1½-2 ft., for hedges, \$60 per 100.

EFFECTIVE EVERGREEN PLANTING (See Pages 31 and 33)

2. *Abies Balsamea* (*Balsam Fir*). 3. *Picea excelsa* (*Norway Spruce*). 1. *Abies Nordmanniana* (*Nordmann's Fir*)

RHODODENDRONS—SPECIMEN PLANTING IN MASS. HIGHLAND PARK, ROCHESTER, N. Y.

Evergreen: Broad-leaved Shrubs

THESE enchanting plants produce the most delightful effects in ornamental planting. Being tolerant to shade they give permanent results where deciduous shrubs would surely die. The rich green, waxy foliage illuminates the gloomy winter days most effectively. They require a moist soil and the cultural directions given for rhododendrons and kalmias should be faithfully carried out. All of these evergreen shrubs are shipped with ball of earth, wrapped in burlap, and can be transplanted with perfect safety, insuring bloom the first season.

AZALEAS

AZALEA kaempferi (*Rhododendron Indicum*). This beautiful variety is not a novelty, but is very rare and in fact has never been offered to the trade. Its flowers are large, and the color is beautiful, a dull brick red. It is wonderfully adapted to the American climate, and is the only Azalea hardy in the New England States, as it has never been winterkilled or its flower buds frozen like any of the other species since being planted at the Arnold Arboretum, Boston, Mass. It was introduced in the U. S. by Professor C. S. Sargent, who gathered the seeds in Japan. Mr. W. J. Bean, of the Royal Gardens, Kew, London, England, says in his bulletin about his visit to the Arnold Arboretum in the latter part of June, 1910: "One of the great annual displays of blossom in the Arboretum is made by the *Rhododendron kaempferi*, a Japanese ally of *R. Indicum*, but very hardy, introduced by Professor Sargent less than twenty years ago." This and most of the other Azalias were past before my visit.

With its dark green leaves, attractive the year round—enduring the severe climate of New England without protection—we recommend it to all lovers of the rare and beautiful in plant life.

Splendid bushy plants,	Each	Doz.
12 to 15 inches.....	\$1.50	\$15.00

A. amoena. A dwarf, bushy shrub; foliage turning to a bronze-brown in winter. Covered entirely in May with enveloping masses of rich purplish red double flowers. It is especially adapted for fringing rhododendron groups, or for bedding on a lawn. Requires protection here, but no matter how much care they need the grower will be amply rewarded for it.

	Each	10	100
10-12 in.....	\$1.25	\$10.00	\$90.00
1½-2 ft.....	2.00	17.50	150.00

A. hinodegiri. A magnificent hardy Japanese variety; a decided improvement upon *A. amoena*, which it somewhat resembles in habit of growth, but is a more vigorous grower and foliage is heavier. Bright carmine flowers are produced in enormous quantities. In fact, when in full bloom, the plant is almost a solid mass of color. Remains in bloom for a long period. In the fall and winter months the foliage assumes a reddish appearance. This variety is hardy in the North.

	Each	Doz.
12-18 in. Imported Plants.....	\$2.00	\$20.00
2-2½ ft. Imported Plants.....	3.50

BUXUS: BOXWOOD

Very popular evergreens, hardy as far north as Boston. They are grown in various shapes and sizes and are used extensively in tubs and jardinières for terraces, porches, and window boxes, as well as for winter decorations. They are effective, as specimen plants for the lawn, retaining their foliage throughout the winter.

BUXUS sempervirens (*Common Tree Box*). This old-fashioned variety is a native of England where it has been used for centuries. Its neat, dense, waxy foliage has secured many admirers in this country. They are well adapted to small places and can be used, with splendid effect, as shrubs for the lawn. For decorative purposes, both summer and winter, they are used extensively in tubs and jardinières.

Standards—	Each
15-18 in. diameter.....	\$3.00
24-30 in. diameter.....	6.00
Pyramids—	Each
2 ft.....	\$2.00
2½ ft.....	3.00
3 ft.....	3.50
4-5 ft.....	5.00
Bush— These are handsome, bushy specimens adapted for hedges.	Each Doz.
10-12 in.....	\$.40 \$4.00
12-16 in.....	.50 5.00
16-20 in.....	.75 8.00

B. var. suffruticosa (*Dwarf Box*). Used largely for edging walks and for borders, and is very effective in all formal planting.

	10	100	1000
3-4 in.....	\$1.00	\$6.00	\$55.00

EUONYMUS: EVERGREEN

Hardy shrubs, of upright growth, with dense, handsome foliage, used extensively for hedges, because it stands trimming wonderfully well. Succeeds best in light, porous soil, and with its rich, glossy leaves, is very effective. Requires same treatment as rhododendrons.

EUONYMUS japonica (*Jap Euonymus*). Semi-hardy evergreen of compact habit, and thick, dark green foliage. Much used for winter decorations; planted in pots and vases.

	Each	10
1½-2 ft.....	\$.75	\$5.00
2 -3 ft.....	1.00	8.00

E. var. argentea (*Silvery Euonymus*). A strong grower, producing leaves marked with bands of white.

	Each	Doz.
2-3 ft.....	\$1.00	\$10.00

E. var. aurea (*Golden Euonymus*). A beautiful variety of this popular family, with leaves variegated green and gold. 2-3 ft., \$1 each; \$10 per doz.

ILEX: THE HOLLIES

Although of slow growth, they will repay all our efforts. The berries or fruit make it a most popular and effective winter decoration, especially at Christmas time. Rich in foliage, it is adapted for hedges and can be sheared as closely as the boxwood.

ILEX aquilifolium (*English Holly*). Bright, evergreen foliage, with scarlet berries in the fall and winter. Not very hardy north of Philadelphia. 2-3 ft., \$2.50 each.

I. crenata (*Japanese Holly*). A hardy Japanese kind, bearing black berries. Foliage small, glossy green. The plant is a rapid grower, and is easily transplanted. As a rich foliage plant it has no equal and will thrive under any conditions except a wet soil.

	Each
2-3 ft.....	\$2.50

I. opaca (*American Holly*). A handsome native evergreen, familiar to all as "Christmas Holly." Its association makes it indispensable. It is perfectly hardy even in vigorous New England; of easy culture and succeeds in all soils. 12-18 in., \$1.50 each; 2-3 ft., \$2.50 each.

KALMIAS: THE LAURELS

They rank in beauty with the rhododendrons and are most effective when planted in large masses. Very hardy, thriving on the cold, bleak mountain tops of New York and Pennsylvania. Treat them same as rhododendrons.

KALMIA angustifolia (*Sheep Laurel, Narrow-leaved Laurel*). The leaves are not as broad as the common laurel; flowers are rosy purple clusters.

	Each	Doz.
2-3 ft.....	\$1.50	\$15.00

K. latifolia (*Mountain Laurel*). One of the choicest of American broad-leaved evergreens. Under cultivation the plants assume a dense, rounded, bushy form, and their bright evergreen leaves and profusion of light pink blossoms are very pleasing. It is well suited for using with rhododendrons.

	Each	10	100
1½-2 ft.....	\$1.25	\$10.00	\$75.00
3 -5 ft.....	2.00	18.00	125.00

We control large tracts in the mountains of Pennsylvania, and our facilities for collecting are unexcelled. We can supply strong, bushy well-shaped plants in almost any size and quality. We are pleased to quote special prices on carload lots and guarantee safe delivery. An ordinary box car will contain from 300 to 600 plants, according to size. All plants are carefully lifted with ball of earth, insuring transplanting without shock.

MAHONIA

MAHONIA aquifolia (*Holly-leaved Mahonia*). Of medium size; large, shining, purplish green, prickly leaves and bright yellow flowers in spring. Very fine in masses or borders. Take on a bronze color in winter; requires a rather moist soil.

	Each	12	100
12-18 in.....	\$.35	\$3.50	\$25.00
18-24 in.....	.75	5.00	35.00

M. japonica (*Jap Mahonia*). A fine evergreen variety and next to the holly in beauty of foliage. Its yellow flowers appear in May.

	Each	12	100
12-18 in.....	\$.50	\$5.00	\$30.00

RHODODENDRON FLOWERS

RHODODENDRONS

There is no more attractive feature of a fine country place than the rich bloom of rhododendrons in the latter part of May and early June. The huge clusters of flowers in many shades of pink, violet, rose, purple, and delicate creamy white, give them right to the first rank among evergreen shrubs. The rich green of the foliage in winter is most effective in contrast with the dull tints of deciduous shrubbery.

No plant possesses greater decorative value. We wish every possessor of this catalogue might see the magnificent display on our grounds and at Highland Park, this city (the photo on page 36 was taken there), famous throughout the country for its collection of rhododendrons.

All are shipped with ball of earth, insuring safety in transplanting. Careful instructions for planting and care accompany each order.

HARDY HYBRIDS—NAMED VARIETIES

Prices: 1½-2 ft., with bloom buds,
\$2 each; \$20 per doz.; \$150 per 100.

- Abraham Lincoln. Soft, rosy red.
- Album elegans. White, slightly suffused with pink; tall grower.
- Charles Dickens. Crimson.
- Charles Bagley. Cerise pink.
- Caractacus. Dark crimson, suffused with white, petals fringed; one of the best.
- Catawbiensis alba. Pure white.
- Everestianum. Beautiful soft pink. Fringed petals.
- General Grant. Rosy scarlet.
- Giganteum. Bright rose, suffused with white, a very distinct variety; very early.
- Grandiflorum. Bright carmine, very free bloomer.
- H. H. Hunnewell. Dark crimson.
- Lady Armstrong. Rose pink, shaded white towards base of petals.

Lady Clermont. Dark red, with crimson blotches, large truss.

Mme. Carvalho. White with bronze blotch.

Mrs. Millner. Rosy crimson.

Mrs. Tom Agnew. Pure white, bronze blotch.

Pres. Lincoln. Soft pink, shaded lavender.

Purpureum elegans. Very dark purple.

Roseum superbum. Clear pink; one of the best in this shade of color.

RHODODENDRON Cunninghamii White. The best of the white-flowered varieties; a strong grower; blooms early and is hardy.

	Each	12	100
1½-2 ft.....	\$1.50	\$15.00	\$100.00

R. maximum (Great Laurel). The greatest of all the native broad-leaved evergreens; there is absolutely nothing that will give the same effect when planted in masses. The plants vary in size from 2 to 7 feet, and carload shipments may include several sizes, if desired. The quality of stock handled by us cannot be surpassed.

	Each	10	100
2-3 ft.....	\$2.00	\$17.50	\$135.00
3-5 ft.....	\$2.50 to 3.00	22.50	150.00
6-7 ft.....	5.00	35.00	200.00

An ordinary box car will contain from 300 to 600 plants according to size.

YUCCA filamentosa (Adam's Needle). Handsome evergreen plants, with long, narrow palm-like leaves, and tall, upright stems, bearing showy, cream-like flowers. Planted on corners with Berberis Thunbergii, are very effective. 25 cts. each; \$2.50 per doz.; \$20 per 100.

YUCCA FILAMENTOSA (Adam's Needle)

SPIREAS

Deciduous Shrubs

THE crowning improvement of the home is the planting of the grounds; but mere planting and grading will not suffice. The right shrubs and plants must be in the right places. Habits of growth, color, and period of bloom and other characteristics must be considered. It is not generally known that ninety per cent of all flowering shrubs bloom in May and June. The other ten per cent. must supply the bloom for the other months, but a judicious selection will supply bloom beginning with the *Daphne Mezereum* as soon as released from the icy bounds of winter until the frosts of autumn nip the *Althea* and the *Hydrangea*. Also the color effect as seen in foliage in autumn covers a wide range and must be studied. (See page 2.) And last, but not least, consideration must be given to the beautiful fruits and berries which some shrubs carry all winter. Hence, it is possible to arrange groups and borders, masses and specimens in such a way as to create a picture of marvelous beauty every month in the year.

Our list of hardy shrubs is sufficiently large to supply every requirement and the plants of sufficient size to produce immediate results.

Prices, except where otherwise noted, 35 cts. each; \$3 per doz. Special prices on larger quantities.

AMORPHA fruticosa (*False Indigo*). Long, pendulous branches, with indigo-colored flowers.

AMYGDALIS communis flore pleno (*Double-flowering Almond*; Syn., *Prunus Japonica*). One of the most beautiful early-flowering shrubs, bearing lovely pink rosettes all over the bush. There is also a pure white variety.

ARALIA spinosa (*Hercules' Club*). Stout, thorny branches of tropical appearance; large panicles of white flowers in August. Very hardy and ornamental. Grows rapidly in any soil and does well in shade. 3-4 ft., 50 cts. each; \$4 per doz.

AZALEAS

A most charming family for the lawn. Lavish of bloom and gorgeous in coloring, they are the

showiest of all our deciduous shrubs. When they bloom in early summer every twig carries a splendid truss of flowers. The native variety should have some shade and are very effective in securing a natural woodland effect by planting in front and close up to borders of large shrubs and evergreens.

AZALEA arborescens (*Fragrant White Azalea*). Flowers white tinged with rose and very fragrant. A good native variety. 12-18 in., 75 cts. each; \$7 per doz.

A. calendulacea (*Flame Azalea*). May and June. Almost scentless but gorgeous, with a multitude of large orange-yellow or fiery red flowers that last a long time. 1½-2 ft., 75 cts. each; \$7 per doz.

GLEN BROTHERS

AZALEAS (Continued)

AZALEA mollis (*Chinese Azalea*). This little plant is literally covered with bloom in April or May. The flowers are rather larger than those of some other azaleas. The bloom shows a multiplicity of colors in shades of red, yellow and orange. 12-18 in., \$1 each; \$7 per doz.

A. pontica (*Ghent Azalea*). April. This species is unequalled for brilliancy and variety of color. The habit is very similar to *A. mollis*; the flowers are not quite so large or perfect; the colors possibly a little more delicate. An especially pretty sort of plant among beds of rhododendrons and other broad-leaved evergreens. 12-18 in., \$1 each; \$7 per doz.

BERBERIS: THE BARBERRIES

(See illustration, page 42.)

An important family of shrubs, combining variety of form and color of foliage with bright red fruits or berries which, carried through the winter, create a charming contrast with the snow. The deep red autumn foliage of the *Berberis Thunbergii* enhances its value for every group and should be considered indispensable for every lawn. They are perfectly hardy, easily transplanted and free from insects. As an ornamental hedge it is as attractive in winter as in summer.

BERBERIS thunbergii (*Thunberg's Japanese Barberry*). A shrub of marked excellence on account of its bright green foliage, which changes to brilliant colors in the fall, and its bright scarlet berries, which are very conspicuous throughout the winter. The habit is dwarf and regularly spreading. Grows well in the shade and is extensively used in hedging. Is very hardy, has never been known to winter-kill even in our extreme cold winters. 1-1½ ft., 25 cts. each; \$2 per 10; \$15 per 100; \$120 per 1000. 1½-2 ft., 30 cts. each; \$2.50 per 10; \$18 per 100; \$150 per 1000.

B. vulgaris (*Common Barberry*). May. An erect, sturdy grower with light green prickly leaves. Clusters of golden yellow flowers; later dark red berries that last throughout the winter.

B. vulgaris purpurea (*Purple Barberry*). A desirable purple-leaved shrub of upright habit and prickly stem, bearing an abundance of yellow flowers in May, and reddish-purple fruit in autumn, which remains nearly all winter. 50 cts. each.

CALYCANTHUS floridus (*Sweet Shrub*). The wood is fragrant; foliage rich; flowers of rare chocolate color, having a peculiarly agreeable odor. Flowers in June and at intervals afterwards.

CEPHALANTHUS occidentalis (*Button Bush*). An interesting, midsummer bloomer; the small, whitish flowers are clustered in little balls, one inch in diameter.

CERCIS japonica (*Japan Judas*). See page 25.

CHIONANTHUS virginica (*White Fringe*). For description, see page 25.

CITRUS trifoliata (*Hardy Japan Orange*). An interesting shrub, growing from 6 to 10 feet high, with smooth, green bark, armed with long, sharp spines; beautiful white flowers, with the delicate orange-blossom fragrance, are followed by small golden fruit, as tempting and as disappointing as the "Apple of Hesperides." 50 cts. each; young plants for hedging, \$20 per 100.

CLETHRA alnifolia (*Sweet Pepper Bush*). A pretty little shrub that blooms freely for several weeks in summer; very fragrant white flowers in slender racemes; an excellent honey plant for bees.

CORNUS: THE DOGWOODS

Spring's harbingers. They combine all that is most desirable and characteristic of that beautiful season. The foliage is dense and the leaves beautiful in form and detail. No other tree or shrub does quite as much to glorify our woods in autumn. The red stemmed varieties give the winter landscape a brilliant aspect.

CORNUS florida (*White Dogwood*). See page 25.

C. mascula (*Cornelian Cherry*). A large shrub that bears bright yellow flowers early in spring and bright red berries in autumn. 40 cts.; \$4 per doz.

AZALEA MOLLIS

JAPAN QUINCE
(*Cydonia*)

CORNUS (Continued)

- CORNUS m. variegata.** A variety with showy variegated foliage. 50 cts. each.
- C. stolonifera** (*Red Osier Dogwood*). The bark on young wood is reddish purple in winter; flowers white; flourishes in wet land.
- C. s. elegantissima** (*Variegated-leaf Dogwood*). A moderate grower, with foliage beautifully variegated with white and green. 50 cts. each.
- C. sanguinea** (*Crimson-bark Dogwood*). The bright crimson hue of the smooth, glossy bark of this bushy plant renders it one of the most conspicuous deciduous shrubs in winter, a season of the year when a bit of color is much appreciated. Should be used freely in large shrubberies.
- CORYLUS avellana purpurea** (*Purple Filbert*). A large bush, with large dark-purple leaves, contrasting very effectively with the green foliage of other plants. Its nuts are delicious and produced abundantly. 50 cts. each. See Nut Department.

CRATAEGUS:

THE THORNS

Romantic associations cluster around the hawthorns. Their beauties have been told for ages in English song and story. The American species are perfectly hardy and healthy; suited to most soils. Their profusion of bloom, picturesque foliage and red fruit in winter make them charming acquisitions.

CRATAEGUS coccinea (*Scarlet Thorn*). A fine native variety. Single white flowers in spring, scarlet fruit in autumn. 50 cts. each; for hedging, \$35 per 100.

C. crus-galli (*Cockspur Thorn*). A well-known native thorn with very long, sharp spines or thorns; fruit bright red; valuable for hedges. 50 cts. each.

C. oxyacantha (*English Hawthorn*). Flowers single white. The celebrated English hedge plant. 50 cts. each.

C. var. coccinea flore pleno (*Paul's Double Scarlet Thorn*). A tree with rich, luxuriant foliage. Flowers unusually large, of a deep crimson color, with scarlet shade and very double. A charming variety. 75 cts. each.

CYDONIA japonica (*Japan Quince*). One of the showiest early-blooming shrubs with bright crimson flowers. Much admired and often used for hedges.

C. j. rosea. A beautiful variety, with flowers of a delicate pink shade, sometimes nearly white. 50 cts. each.

DAPHNE cneorum. A charming trailing evergreen plant, and a continuous summer bloomer; its small rosettes of rosy pink flowers are delightfully fragrant. With ball, \$1 each.

D. mezereum (*Pink Mezereon*). A small deciduous shrub that loads the air with the delightful fragrance of its small pink flowers as soon as it is released from the icy bounds of winter. With ball, \$1 each.

DEUTZIAS

Popular flowering shrubs, beautiful in bloom; of rather formal habit, they are better adapted to the garden and along borders rather than the lawn.

DEUTZIA crenata plena (*Double Pink Deutzia*). All the deutzias are valuable and very profuse bloomers in early summer. This is one of the prettiest tall-growing varieties.

D. c. candidissima (*Double White Deutzia*). Very pretty; pure white. 25 cts. each.

**BERRIES OF BERBERIS
THUNBERGII**
(See Description, Page 40)

DEUTZIA (Continued)

- DEUTZIA crenata** (*Pride of Rochester*). A fine double variety, rather earlier than *D. crenata*; flowers pink in bud, white when fully expanded. 25 cts. each.
- D. c. scabra** (*Rough-leaved Deutzia*). The most vigorous grower; flowers single, white. 25 cts. each.
- D. c. watereri**. A new white variety from England, with larger and more double flowers. 25 cts. each.
- D. gracilis** (*Dwarf Deutzia*). A low bush, 3 or 4 feet in diameter; flowers pure white and graceful; one of the most popular small shrubs. Fine for winter forcing. 25 cts. each.
- D. lemoinei**. A hybrid form, resembling *D. gracilis*, but more vigorous in growth and with larger flowers. 50 cts. each.
- DIERVILLA florida** (*Weigelia*). See *Weigelia*.
- DIRICA palustris** (*Leather-wood*). A small round bush, whose numerous twigs look and feel like brown leather cords; flowers yellow before the leaves expand. 50 cts. each.

ELAEAGNUS argentea (*Silver Thorn*). An erect, thorny shrub, of striking appearance; loaded with small pink berries in autumn; a fine hedge plant.

E. longipes (*Japanese Silver Thorn*). A useful new shrub for the ornamental grounds and for the fruit garden, forming a medium-sized bush of attractive appearance. The dark brown bark of the young growth, the bright green leaves, and the abundant crop of bright-colored fruit, about as large as currants, and quite as palatable, make it a plant of more than ordinary merit. The fruit makes excellent jam and jelly and is well worth cultivating for this use. 50 cts. each; \$5 per doz.

EUONYMUS alatus (*Winged or Corky Bark Euonymus*). The branches are singularly covered with corky ridges. The autumn colorings of foliage are very fine. 50 cts. each.

E. americanus (*Burning Bush, or Strawberry Tree*). Very conspicuous in autumn and winter, when loaded with scarlet seed-pods, from which the orange-colored berries hang on slender threads; in this, the American species, the branches are quadrangular.

E. europaeus (*European Burning Bush, or Strawberry Tree*). This is darker and more showy than the American.

E. latifolius (*Broad-leaved Burning Bush*). A species with broader leaves and larger fruit, that ripens earlier than the former. 50 cts. each.

E. radicans variegatus. A low, trailing shrub, with small evergreen leaves, edged with white; useful and effective for edging beds or groups, and for covering stumps and low walls.

EXOCHORDA grandiflora (*Pearl Bush*). A very hardy and handsome shrub from northern China and Japan, forming a bush 10 or 12 feet high. The pure white flowers are borne in short clusters, on light, wiry branches, which bend beneath their load of bloom enough to be airy and graceful.

FORSYTHIA suspensa (*Drooping Golden Bell*). A very early and showy spring bloomer; flowers bright yellow. The long, slender branches which droop gracefully until they reach the ground are very effective for covering steep slopes, walls, fences and arbors. 25 cts. each.

F. suspensa fortunei (*Fortune's Golden Bell*). Similar to *suspensa* but of stronger and more upright growth. Flowers are a rich golden yellow. We recommend it as the best.

F. viridissima (*Green-Barked Golden Bell*). More erect, and shrubby in habit; the light green bark is conspicuous and interesting all winter.

ALTHEA
(Rose of Sharon)

HIBISCUS moscheutos (*Marsh Mallow*, or *Mallow Marvels*). A very showy plant, found naturally in marsh land, but grows equally well in the garden and is a valuable mid-summer bloomer, adding color to the shrubbery border at a time when much needed. The pink

flowers are 4 to 6 inches in diameter. 20 cts. each; \$2 per doz.

H. m. crimson eye. The large, pure white flowers with crimson center make this variety more showy than the pink form.

HIBISCUS: SYRIACUS

ALTHEA, OR ROSE OF SHARON

The altheas are fine, free-growing flowering shrubs of very easy cultivation. Desirable on account of flowering in August and September, when nearly every other shrub or tree is out of bloom. The flowers are of good size, many-colored, trim and attractive. Tree altheas are very desirable, and the handsomest flowering tree we know of. Perfectly hardy and can be had in various colors if desired. Entirely free from all insect pests; always give delight and satisfaction. Require pruning each spring.

HIBISCUS S. alba plena. Double white, with crimson center.

H. S. ardens. Bluish purple; a distinct color and a good variety.

H. S. Boule de Feu. Single flower; red.

H. S. carnea plena and **Lady Stanley.** Two of the best double varieties; white and bluish, with crimson throats.

H. S. coelestis. Single, of a decided blue shade; desirable for variety in color.

H. S. Comte de Flanders, and **La Reine**, are two fine double varieties; deep rose and red.

H. S. Joan of Arc, and **Pearl.** Two fine double varieties with no trace of color in center, and probably the finest in the hardy group.

H. S. totus albus. Pure white single flowers without the colored throat found in most other varieties. One of the best.

H. S. variegata (*Variegated-leaved Althea*). An excellent variegated-leaved shrub for foliage effect.

Above varieties in tree form. 5-6 ft., 75 cts. each; \$7.50 per doz.

HYDRANGEAS

Old friends, and among the most popular shrubs for the lawn and about the house. Blooming in August and September when flowers are scarce, enhances its value. It is one of the good, all around shrubs that may be depended upon at all times to give the most complete satisfaction. The wonderful pyramids of bloom are now used extensively for indoor decorations. Easily transplanted and rapid in growth.

HYDRANGEA, New Everblooming "Hills of Snow." The grandest shrub of recent introduction; the color of the flower is a very snow-like white; profuse bloomer and reaches a height of 5 to 6 feet. When in full bloom it is one of the most striking as well as one of the most beautiful shrubs. A four-year-old plant has produced 126 perfect blooms at one time. We have one of the best stocks of this variety in the country. 50 cts. each; \$5 per doz. See page 44.

H. hortensis nigra (*Red-branched Hydrangea*; Syn., *H. Cyanoclada*). A variety with dark purple or almost black foliage, and fine rosy pink flowers; a very free bloomer, and one of the best for pot culture. 50 cts. each.

H. h. otaksa. An admirable dwarf pink variety that blooms freely when quite small; flower-heads very large and showy. Tender.

H. h. Thomas Hogg. The best white hydrangea of the hortensis class; a free and continuous bloomer. Tender. See page 45.

H. paniculata (*Japan Hydrangea*). A vigorous, hardy species, with large, erect panicles composed chiefly of small, perfect flowers, with but few of the showy, sterile ones; blooms earlier than *H. p. grandiflora*. 50 cts. each.

H. p. grandiflora. One of the most popular hardy shrubs. The immense heads of bloom are cream-color in bud, pure white when fully expanded, changing to pink and bronze with age, and finally to brown when frosted; entirely hardy.

H. p. grandiflora (*Tree Form*). 3 to 4 feet. A superb decorative shrub. 50 cts. each.

HYPERICUM (*St. John's Wort*). The hypericums have yellow flowers blooming in July and August. They are a very desirable family; possess many good qualities and no objectionable ones.

HYPERICUM (Continued)

- H. calycinum** (*Aaron's Beard*). A low trailing species, excellent for rocky places and ground covering; a constant bloomer.
- H. moserianum**. A beautiful evergreen, trailing shrub, blooming all summer, with rich, golden flowers, resembling a single rose; hardy.
- ILEX verticillata** (*Black Alder, Winterberry*; Syn., *Prinos verticillatus*). A deciduous shrub, that is covered with scarlet berries, hanging on late into the winter, giving a brilliant effect.
- ITEA virginica**. A small bush, 3 to 4 feet high, with erect spikes of white flowers; beautiful in early summer days.
- JASMINUM nudiflorum** (*Yellow Jasmine*). A slender shrub, requiring support of a trellis or wall; small yellow flowers open during the first days of spring. An old variety and popular.
- J. officinale** (*Hardy White Jasmine*). A more tender species; needs a sheltered position; summer bloomer; flowers white and fragrant. 25 cts. each.
- KALMIA latifolia** (*Mountain Laurel, Calico Bush*). See Evergreen Shrubs.
- KERRIA alba**. See Rhodotypus, page 45.
- K. japonica** (*Corchorus, Globe Flower*). A handsome bush, with smooth, green bark and orange-yellow double flowers; very pretty and desirable.
- K. japonica variegata** (*Variegated-leaved Corchorus*). A slender plant with variegated white and green foliage; much used for edging.

- LABURNUM vulgare** (*Golden Chain*). A very ornamental and popular tree, with trifoliate leaves and loose, pendulous clusters of bright yellow flowers in early summer. 50 cts. each.
- LEUCOTHOE catesbaei** (*Andromeda*). See Evergreen Shrubs.
- LIGUSTRUM ibota** (*Japan Privet*). A rapid grower in most situations; does well in partial shade; very ornamental for hedges or for association with other shrubs; almost an evergreen and grows freely in all soils; is compact and regular in form and bears shearing to any extent. 1½-2 ft., 35 cts. each; \$12 per 100. 2-3 ft., 50 cts. each; \$15 per 100.
- L. regelianum**. A new variety with branches spreading almost horizontally, forming a low dense shrub of great beauty; especially fine in autumn when the foliage turns to a bright red. Perfectly hardy for any locality. 1½-2 ft., 35 cts. each; \$15 per 100. 2-3 ft., 50 cts. each; \$20 per 100.
- L. ovalifolium** (*California Privet*). A very ornamental shrub with thick glossy, nearly evergreen leaves; very popular for ornamental hedges and for trimmed specimens, especially along the sea coast. Planted more extensively than any other.
	25	100	1000
1 -1½ ft.....	\$1.00	\$3.00	\$25.00
1½-2 ft. transplanted...	1.50	5.00	30.00
2 -3 ft. transplanted...	2.00	8.00	50.00
- L. ciliatum**. Narrow foliage, and showy white flowers, and profusion of black berries.

HYDRANGEA-ARBORESCENS (*Hills of Snow*). (See Page 43)

GLENWOOD NURSERY

LONICERA fragrantissima (*Early Fragrant Honeysuckle*). Small, fragrant flowers appearing before the leaves; foliage almost evergreen and deep green. Very desirable.

L. morrowi. A fine variety from Japan; valuable for its handsome, red fruit.

L. standishi (*Standish's Bush, Honeysuckle*). Flowers creamy-white in May, before the leaves. One of the earliest flowering shrubs.

L. tartarica (*Tartarian Honeysuckle*). Pink flowers in June. A lovely old favorite with its delightful fragrance and should be planted plentifully about the home.

L. t. alba (*White Tartarian Honeysuckle*). Similar to the Red Tartarian in growth, producing white flowers very abundantly.

L. xylosteum (*Fly Honeysuckle*). Pinkish-yellow flowers, before the leaves in May, followed by crimson berries.

MYRICA cerifera (*Candleberry*). A sub-evergreen, low-spreading, native shrub, found in sandy places. Its exceeding richness of foliage is the admiration of all who see it. It covers itself with crowded masses of small white berries in autumn. There is nothing to equal it for covering sandy or gravelly banks.

ries in autumn. There is nothing to equal it for covering sandy or gravelly banks.

PAVIA alba (*Dwarf Horse Chestnut*). A beautiful spreading shrub, producing numerous large showy spikes of flowers late in June; very valuable. 50 cts. each.

PHILADELPHUS coronarius (*Syringa, or Mock Orange*). Of vigorous habit; very hardy, with large handsome foliage and beautiful white flowers, produced in the greatest profusion at the blossoming season. It merits a prominent place in all collections of shrubbery.

P. c. aurea (*Golden-leaved Syringa*). This is a very pretty, medium-sized plant, with golden-yellow foliage. It keeps its color the entire season; valuable for striking contrasts with purple-leaved shrubs.

P. gordonianus (*Gordon's Mock Orange*). A vigorous grower and profuse bloomer; flowers slightly fragrant and valuable on account of blooming late.

P. grandiflorus. Very showy, large flowers, slightly fragrant; branches somewhat straggling.

RHODODENDRON. (See Evergreen Shrubs.)

HYDRANGEA (*Thomas Hogg*). (See Page 43)

RHODOTYPUS kerrioides (*White Kerria*). Flowers all summer. A n interesting beautiful shrub from Japan. Arching, graceful growth, and handsome, distinct leaves. The syringa-like flowers bloom through the season from May, which gives it great value. Does well in all soils. Shiny, black seeds in fall.

RHUS continus (*Purple Fringe*). See page 29.

RIBES aureum (*Missouri Flowering Currant*). A gay flowering shrub in early spring; very easy to cultivate.

ROBINIA, hispida (*Rose Acacia*). A m i d s u m m e r bloomer; flowers bright rose-color, in loose clusters. 25 cts. each.

SALVIA greggii. New, ever-blooming, red flowering shrub. A hard-wooded salvia, grows 3 to 4 feet high and 3 to 4 feet wide in a compact globe. Extremely hardy; flourishes and blooms profusely in the hottest, driest weather. Begins to bloom in early spring and continues until long after the early frosts have set in. The color is an indescribable, lovely shade of red, much the color of a well-grown American beauty rose. One year plants, \$1 each; \$10 per doz.

SAMBUCUS canadensis (*Common American Elder*). Broad panicles of white flowers in June; reddish purple berries in autumn.

SAMBUCUS (Continued)

SAMBUCUS nigra aurea (*Golden-leaved Elder*). Beautiful variety with light yellow leaves, which hold their color well and render the plant very conspicuous and effective.

SPIRAEA (*Meadow Sweet*). Elegant low-growing shrub of easiest culture. Their blooming season covers about three months.

S. Anthony Waterer. This is a fine new dwarf spiraea, with dark, crimson flowers, darker than bumalda in the late part of summer. It is a very low-growing shrub, one of the finest of recent introduction.

S. arguta. This is one of the best; very early flowering white spiraea. It is of dwarf habit and has clear white flowers. Early May.

S. billiardii. Flowers are rose-colored and bloom nearly all summer.

S. blue (*Caryopteris Mastacanthus*). A native of China. Produces its beautiful blue flowers in abundance all through the autumn until checked by frosts. Being herbaceous, it will increase in size, throw up strong, blooming shoots each season to the delight of its owner.

S. bumalda. Habit dwarf, but vigorous; foliage narrow; flowers rose-colored, in great profusion during mid-summer and fall.

S. cantonensis (*Lance-leaved Spiraea*).

A most graceful shrub, with slender, arching branches; a native of China. The leaves are lanceolate; flowers pure white; numerous densely flowered umbels in late spring.

S. japonica. One of the finest. Flowers brilliant pink, with variegated foliage.

S. opulifolia aurea (*Golden Spiraea*). Double, white flowers in June. Very conspicuous.

S. prunifolia (*Bridal Wreath*). A superb old-fashioned variety, with graceful, upright, slender branches covered with a wreath of white flowers in May. The leaves turn to a beautiful orange color in the fall.

S. reevesiana. Narrow, pointed leaves, large, round, white clusters of flowers in June, covering the whole plant and rendering it exceedingly effective.

S. r. flore pleno. A double-flowered variety; one of the showiest.

S. thunbergii. Of dwarf habit, and rounded, graceful form; branches slender and somewhat drooping; foliage narrow and yellowish green; flowers small, white, appearing early in spring, being one of the first spiraeas to flower. Desirable on account of its neat, graceful habit. Forces well in winter.

S. van houttei. One of the finest. In early June it is covered with large, white flowers, presenting a beautiful appearance. Hardy.

LILAC, FRAU BERTHA DAMMANN (*Syringa vulgaris*)

STYRAX japonica (*Japan Silver Bell*). Low-growing shrub, or dwarf tree; small, dogwood-like leaves and smooth bark; branches horizontal, and very picturesque in appearance. Flowers small, white, bell-shape, and fragrant, hanging along the branches. A most charming shrub.

SYMPHORICARPUS racemosus (*Snowberry*). Bushy form, pink flowers in summer; quantities of large, white, waxy, roundish berries in autumn. Very ornamental.

S. vulgaris (*Coral Berry, Indian Currant*). Low-growing, spreading, graceful habit; foliage attractive; noteworthy from the beauty of its clusters of red berries.

SYRINGA: THE LILACS

These are identified with our childhood days. Even then their fragrance and beauty were unsurpassed. To-day the improvement in variety, form and color is marvelous. Nothing introduced in late years has proved so popular as the new lilacs. For years we have been adding to our assortment. We now have over sixty varieties of this beautiful family, all included in Rochester Highland Park collection, famous in both hemispheres, and to see which, plant lovers cross the continent.

WEIGELIA ROSEA, DIERVILLA FLORIDA

SYRINGA (Continued)

- SYRINGA japonica** (*Japanese Tree Lilac*). A remarkable new species from Japan, becoming a good-sized tree. Foliage dark green, glossy; flowers small, feathery, but formed in great panicles, often 18 inches long; very light straw color. Blooms a month later than other lilacs. 50 cts. to 75 cts. each.
- S. alba** (*White Lilac*). Delicate, white fragrant flowers, shaded with purple. 50 cts. each.
- S. pekinensis pendula** (*Weeping Lilac*). New. Produces large clusters of beautiful, intensely sweet flowers. A great acquisition. \$1.50 each.
- S. oblata**. An early, flowering, light purple species, with large, round, dark green leaves. Flowers before any other lilac, in spring. 50 cts. to \$1 each.
- S. villosa**. Decidedly a valuable variety. It is a very free bloomer; flowers in large, branching panicles; color in bud flesh-pink, changing to white; very fragrant. A late bloomer. One of the very best lilacs.

S. vulgaris (*Common Lilac*). The well-known, old-fashioned lilac, bluish-purple flowers. 50 cts. to \$1 each.

S. v. alba (*Common White Lilac*). Small and narrow foliage. Flowers white with a bluish tint. Fragrant and free-flowering.

S. Charles X. Large shining leaves; trusses large, rather loose, flowers single; reddish-purple. 50 cts. each.

S. insignis rubra (*Red Lilac*). An erect, vigorous grower, with large spikes of reddish-purple flowers.

- S. Ludwig Spath.** New, and believed to be the finest of its class. Color purplish red. A great acquisition. 50 cts. each.
- S. Frau Dammann.** New. Pure white, deliciously scented. A profuse and early bloomer. 75 cts.
- S. Marie Legraye.** Planted very extensively in all parts of the country. Trusses large, flowers single white. Very desirable. 75 cts. each.
- S. President Grevy.** A lovely blue. Flowers large and double, measuring three-quarters of an inch in diameter; its clusters are large; at least 10 inches in length and 5 inches across. A grand lilac. 50 cts. each.

SYRINGA (Lilac) GARDEN COLLECTION

See Superb illustration, back cover page

24 strong, vigorous, two-year bushes, with variety of color, carefully selected, will give you an enchanting garden, with beautiful colorings and delightful fragrance. Easy to care for and growing more beautiful each year. Study the beautiful picture on last cover page and see the possibilities with such a garden.

The collection of twenty-four for \$10.

VIBURNUM: SNOWBALLS

It would be impossible to give too much praise to this magnificent group. They grow into great voluptuous specimens, some of them 15 to 20 feet high, covered with thousands of snow-white blossoms. Its adaptability for combinations with other shrubs is unexcelled. Hardy, generous, beautiful, we cannot love them too much.

- VIBURNUM cassinoides.** Cymes of white flowers in June. Black berries in autumn. Handsome foliage. Native.
- V. dentatum** (*Arrowwood*). Glossy, handsome leaves and flowers in June, greenish-white; fine, steel-blue berries in fall.
- V. latana** (*Wayfaring Tree*). A large, robust shrub, with soft, heavy leaves and large clusters of white flowers in May; succeeded with red fruit; retains its foliage very late. 50 cts. each.

GLEN BROTHERS

JAPAN SNOWBALL
(*Viburnum plicatum*)

VIBURNUM (Continued)

VIBURNUM lentago (*Sheepberry*). Creamy white; very fragrant flowers and light, glossy green foliage; growth and habit like pearl-leaved.

V. plicatum (*Japanese Snowball*). Handsome, plicated leaves, globular heads of pure, white, neutral flowers early in June. It surpasses the common variety in several respects. Its habit is better, foliage much handsomer, flowers whiter and more delicate. We recommend this most highly. 50 cts. each; \$4 per doz.

V. opulus (*High-bush Cranberry*). One of the best for planting. Its berries resemble cranberries, hanging until destroyed by frost late in the fall; wood and foliage similar to that of the common snowball.

V. sterile (*Guelder Rose, Snowball*). A large-sized shrub, with globular clusters of pure white, sterile flowers the latter part of May.

V. sieboldi. Long, large, thick leaves, of a glossy green color, and clusters of white flowers about May 20. \$1 each.

V. tomentosum. This is the single form of the beautiful Japan snowball, *viburnum plicatum*. Pure white flowers along the branches in flat cymes in great profusion in June. It is hardy, vigorous and free-blooming.

THE WEIGELIAS

Modern botanists identify this family under the head of diervilla, but as there is more or less confusion arising from the introduction of new varieties and the hybridization of old varieties we list them under the head of weigalias, by which they are best known. It is a most attractive family and all varieties are profuse bloomers commencing in May and continuing through the entire summer.

Weigelia aurea variegata (*Variegated Weigelia*). Very desirable on account of its finely variegated foliage, which is yellowish white and lasts the entire season, and contrasts finely with its rose-colored flowers; of dwarf habit.

W. candida. A valuable variety. While white varieties heretofore known have been lacking some important points, this has every valuable quality. Of vigorous habit, an erect grower, becoming in time a large shrub; flowers pure white, in great profusion during June, continuing to bloom through the summer and even until autumn. 75 cts. each.

W. desboisi (*Deep Rose*). A beautiful variety, with deep, rose-colored flowers, resembling rosea, but flowers much darker.

W. Eva Rathka. New; flowers brilliant crimson; a beautiful distinct shade, produced in great profusion throughout the season. The most beautiful of all the Weigalias. 50 cts. each.

W. hortensis nivea. Flowers pure white, foliage large, habit vigorous, and a profuse bloomer. Of dwarf, spreading habit and slow growth. 50 cts. each.

W. lavalley. One of the darkest varieties. Flowers dark reddish-purple. \$1 each.

W. rosea. A hardy and beautiful shrub, bearing in May a profusion of rose-colored flowers. Considered one of the finest. 50 cts. each.

XANTHOCERAS sorbifolia. A shrub of remarkably handsome appearance. Long, pinnate foliage, like that of a mountain ash tree, only much smoother and richer. Its blossoms are in upright spikes, bell-shaped, of pure white, exquisitely painted in reddish-brown, in April or May. 50 cts. each.

XANTHORRHIZA apiifolia (*Yellow Root*). A handsome shrub, growing well in shady places. It is distinguished by its bright yellow stems and graceful sprays of purple flowers. 50 cts. each.

Ornamental Vines

ORNAMENTALS of this class are so hardy, so easily grown, and so beautiful that they deserve greater attention than they receive. No artist can produce pictures equal to the wealth of beauty displayed by the elegant wisteria, the graceful honeysuckle or the charming and magnificent clematis when in the glory of full bloom, and there is nothing in art that will in any degree compare with the gorgeous autumnal hues of the ampelopsis. They are indispensable for screening porches and summer houses, for covering tree trunks and trellises. Many varieties when in flower fill the summer air with their fragrance. Planted generously, they will in a year or two transform a new place. Give them a fine rich soil and they will require little attention.

Prices, except where otherwise noted, 35 cts. each; \$3.00 per doz.; \$20.00 per 100.

ACTINIDIA arguta. A quick-growing climber from Japan. Flowers white with purple center, and sometimes cover entire vine. Fruit round and edible. 25 cts. each; \$2.50 per doz.

AKEBIA quinata. A charming Japanese climber with shining foliage and chocolate-colored flowers in June; leaves remain on into the winter, something like Hall's Japan Honeysuckle. 25 cts. each; \$2.50 per doz.

AMPELOPSIS quinquefolia (*Virginia Creeper*). A native climber of vigorous growth with digitate leaves; a fine green in summer, changing to rich crimson in autumn. It throws out tendrils at the joint, by which it fastens to anything it touches; affords shade quickly and is very desirable for covering walls, verandas, or trunks of trees. 25 cts. each; \$2.25 per doz.

A. veitchii tricuspidata (*Japanese or Boston Ivy*). A beautiful, hardy, climbing plant of Japanese origin. Especially valuable for covering walls, as it clings firmly to the smoothest surface, covering it evenly with overlapping leaves, which form a perfect mass of foliage. The color is a fresh, deep green in summer, changing to the brightest shade of crimson and yellow in autumn. A very rapid grower, is quite hardy and becomes more popular every year. 25 cts. each; \$2 per doz.

ARISTOLOCHIA siphon (*Dutchman's Pipe*). A very rapid climber with large, dark foliage, and curious, pipe-shaped, yellowish-brown flowers. 75 cts. each; \$7.50 per doz.

BIGNONIA

(Trumpet Vine, Cross Vine)

A most beautiful evergreen vine for covering walls, arbors and trellises and trunks of trees. Its trumpet-shaped flowers of orange and yellow are borne in great profusion, creating a most charming effect in early summer. Is sometimes grown in conservatories and is very effective when used in this way.

BIGNONIA grandiflora (*Trumpet Vine*). New. Leaves thick and shining, and immense blossoms of gorgeous crimson and yellow. 3-year, 50 cts. each; \$4 per doz.

B. radicans (*Scarlet Trumpet Vine*). A splendid climber; vigorous and hardy, with clusters of large, trumpet-shaped scarlet flowers in August. 2-year and 3-year, 25 cts. each; \$2.50 per doz.

CELASTRUS articulatus (*Japanese Bitter-sweet*). This species flowers and fruits when quite small and quite freely. From Japan. 2-3 ft., 25 cts. each; \$2.50 per doz.

C. scandens (*American Bitter-sweet*). A native twining plant having large leaves, yellow flowers, and clusters of orange capsuled fruit. 2-3 ft., 25 cts. each; \$2.50 per doz.

CLEMATIS

The different varieties and species of clematis now in cultivation are of the highest beauty and utility. They vary greatly in their foliage and flowers, and are adapted to various uses. Some of them, such as *C. paniculata* from Japan, are very fragrant, and are particularly attractive on this account. Large flowered varieties, like the well-known *C. Jackmani*, are extremely showy and produce great numbers of their beautiful flowers. These plants are trained on trellises, and over porches and pillars. All are hardy, of easy growth, and will adapt themselves to nearly or quite all soils.

SMALL FLOWER VARIETIES

CLEMATIS coccinea. Very hardy; bears thick, bell-shaped flowers, bright red coral; blooms very profusely during June until frost; valuable for foliage, being a peculiar green and elegantly cut and variegated.

GLEN BROTHERS

CLEMATIS, Small Flower Varieties (Cont'd)

CLEMATIS Crispa. Very hardy and free bloomer; flowers blue with center of petals opaque white; very fragrant; useful for festooning.

C. paniculata. A sweet-scented Japanese clematis. This variety is now quite generally planted throughout the country. It is a vine of very rapid growth, quickly covering trellis 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. They appear in August and September at a season when most vines are out of bloom. We can recommend this plant in the strongest manner as one of the best vines to grow near the house. It makes a growth of from 25 to 30 feet in a single season and does well when cut back to the ground each year. It is the easiest growing, and most satisfactory of all the clematis. 25 cts. each; \$2.25 per doz.

CLEMATIS HYBRIDS

LARGE FLOWER VARIETIES

Extra strong plants, 50 cts. each; \$4 per doz.

Alexandria. This is one of the continuous blooming sorts of real merit. The flowers are large and of a pale, reddish violet color. Desirable. July to October.

Flammula (*European Sweet*). A well-known variety, highly prized for the fragrance of its small white flowers and its remarkable dark green leaves, which remain on the plant very late; a vigorous grower.

Dutchess of Edinburgh. A double, pure white variety which is very popular; requires some protection; deliciously scented.

Henryi. One of the best perpetual hybrids; of robust habit and a very free bloomer. Flowers white, large and very showy. July to October.

Jackmani. One of the most popular varieties, a free grower and abundant and successful bloomer, producing flowers until frozen up. Color is intense violet-purple, remarkable for its velvety richness. Originally introduced over 45 years ago, since which time many new varieties have been placed on the market, the Jackmani has no superior and very few, if any, equals.

John Gould Veitch. Flowers are very handsome, distinct, large, double, and of a light blue or lavender color; a very choice double variety. June and July.

Lawsoniana. Showy and free, very large, beautiful rosy-purple flowers.

Madame Grange. A remarkable and vigorous-habited variety; flowers 5 inches across, of a rich, deep velvety maroon-crimson, becoming purplish with age, having a red bar down the center of each sepal.

Mme. Baron Veillard. Beautiful pink shading on rose.

Mme. Edouard Andre. A vivid crimson clematis, large size and borne as freely as the Jackmani. The habit is vigorous and the plant is popular on account of its exceptional brilliancy and persistency as a bloomer.

CLEMATIS PANICULATA, FRAGRANT

Red Jackmani. New. A desirable red clematis has been sought for years, and this is the first one of real merit. We found it in Lincoln, England, in summer of 1902. It is a true Jackmani with crimson blossoms. We heartily recommend it. We have the only stock of it in America.

Ramona. Said to be an American seedling of the Jackmani type; one of the strongest growers; flowers lavender-blue, similar to the gem. This variety invariably gives satisfaction.

Ville de Lyon. Crimson. Flower splendidly formed; a variety in much demand.

EUONYMUS radicans (*Creeping Euonymus*). An evergreen; clings to walls after the manner of ivy.

TRUMPET VINE (*Bignonia radicans*). (See Page 49)

EUONYMUS (Continued)

EUONYMUS variegata. A variety of euonymus with variegated leaves.

HEDERA helix (*English Ivy*). The old, common ivy. This is hardy here, and does especially well when planted on the eastern or northern side of buildings, where it is free from the sun in winter.

KUDZU VINE (*Pueraria Thunbergiana*, or *Dolichos Japonica*). The most rapid-growing vine in cultivation, attaining, after once being established, a height of 50 feet or more in one season. Its foliage is large and furnishes dense shade; it bears small racemes of rosy-purple, pea-shaped blossoms, towards the close of August. Exceedingly valuable for covering porches, pergolas and trellises. See illustration, page 52. 50 cts. each; \$5 per doz.

LONICERA: HONEYSUCKLE

Splendidly adapted for covering walls, arbors, trellises and unsightly objects. Most of them have handsome and sweet-scented flowers, but because

they have a tendency to lose their foliage at the bottom, should be planted with other vines. The *L. Japonica* makes a very handsome ground cover and is used extensively for this purpose.

25 cts. each; \$2.50 per doz.; \$20 per 100.

LONICERA belgica (*Monthly Fragrant Honeysuckle*). Flowers red and pale yellow, sweet scented. Blooms through the summer.

L. flava (*Yellow Honeysuckle*). A well-known native vine, with yellow trumpet flowers.

L. heckrotti. Flowers rose color on the outside, yellow in center; blooms all summer.

L. hendersonii. Yellow.

L. japonica var. aurea reticulata (*Golden Honeysuckle*). A handsome variety, having foliage beautifully netted or variegated with yellow.

Var. brachypoda (*Evergreen Honeysuckle*). A Japanese variety, moderately strong grower, with leaves veined and spotted with bright golden-yellow.

Var. chinensis. This has reddish foliage, and reddish flower buds. When expanded, creamy-white petals are displayed.

Var. halliana (*Hall's Honeysuckle*). A strong vigorous, evergreen variety, with pure white flowers changing to yellow. Very fragrant; covered with flowers from June to November.

L. sempervirens var. fuchsioides (*Scarlet Trumpet Honeysuckle*). A strong grower, and produces scarlet inodorous flowers all summer.

L. sullivanti. Red berries, yellow flowers and delightful foliage.

LYCIUM chinese (*Matrimony Vine*). A vigorous, hardy climber; it will soon cover any desired space. It has dark green foliage and beautiful flowers and loads of small berries, which far surpass the holly berries, which are seen in all parts of the country at Christmas time. The Chinese matrimony vine is regarded as indispensable where a hardy climber is desired.

VINCA minor (*Periwinkle*). A fine dwarf evergreen trailing plant, used extensively for carpeting the ground under shrubs and trees, or in any position where it is too shady for other plants to thrive. 25 cts. each; \$2.50 per doz.

VITIS cordifolia (*Frost, or Winter Grape*). A most vigorous native variety; climbs to the top of the highest trees; small black berries and handsome foliage.

V. labrusca (*Fox Grape*). Strong-growing vine, producing large, purple-black fruit, highly prized for making delicious preserves. It quickly covers thickets and the tallest trees; much used for natural effects.

GLEN BROTHERS

KUDZU VINE. (See Page 51)

WISTARIA

Unsurpassed for beauty and picturesqueness, it will cover arbors and roofs, clinging tightly to the eaves of houses. It is hardy and lives to a great age, doing as well in cities amid unfavorable conditions as in the country.

There are several ideas about training wistaria. A good way is to leave it alone. This produces rugged, twisted and picturesque branches and gives it a certain oriental effect, but it is not the best method of covering a wall space solidly or for making the best display of bloom. To cover a wall complete it is necessary to keep the leaders taut and to train outside branches wherever they are needed. If quality of bloom is first consideration, the vines should be pruned back every year to spurs, a common method in Japan. In Japan the low, one-story Japanese building will have a wistaria so trained that the vine follows the eaves all around the house. The foliage is all above, and the yard-long clusters of purple blooms depend therefrom in solid, unbroken linear masses, two or three ranks deep. Those who wish to give a young wistaria an extra good start may sink a bottomless

tub in the ground and fill it with good soil. If the wistaria is to be trained to a tree, select an old tree, if possible, which is past the height of its vigor. The Chinese wistaria was introduced into England about 1816, and 25 years later there was a specimen in England with branches attaining 100 feet on each side of the main stem, and another specimen that covered 905 square feet of wall space. It blooms in May and usually gives a small crop of flowers in August or September. The spring crop is borne on spurs of flowers in August or September, while the autumn crop is borne on terminal shoots of the season.

Wistaria chinensis (*Chinese Wistaria*). A most beautiful climber of rapid growth, and producing long pendulous clusters of fragrant pale blue flowers. When well established makes an enormous growth; it is very hardy, and one of the most superb vines ever introduced. 50 cts. each; \$4 per doz.
var. alba. Magnificent racemes of white flowers. It has all the good qualities of its parent, the *Chinensis*, and is a superb variety. 75 cts. each.

W. multijuga (*Loose-cluster Wistaria*). A rare species with purplish or lilac-colored flowers borne in immense clusters, sometimes 2 feet in length. 50 cts. each; \$4 per doz.

W. Tree Form. A most desirable novelty; grown with great care and expense. In two colors, white or purple. An elegant and showy shrub for lawn planting. During the past two years specimens on our own grounds have attracted more attention than anything else and we now regard it as of exceptional merit. \$2 each.

WISTARIA, PURPLE

HEDGES (CALIFORNIA PRIVET)

See *Ligustrum ovalifolium*, page 44

Hedge Plants

NOT many years ago the only hedges to be seen were those used for defense or for defining boundaries, but to-day they are planted extensively for ornament. Many beautiful effects are now possible and it is needless to say that these fences of living green beautify our homes and are rapidly supplanting the old-fashioned picket and iron fences. Ornamental hedges may be either deciduous or evergreen. Probably the most widely planted of the deciduous hedges is the California Privet. It is faultless in character and trims to any shape. In our opinion the Barberry *Thunbergii* for beauty and effectiveness should lead the list. Of the evergreen, Hemlock is the most beautiful but not so easy to establish as the Arborvitæ or Norway Spruce. The use of flowering shrubs for hedges is growing in popularity, and attractive varieties such as Japan Quince, *Deutzia* and *Altheas* are used with splendid effect. In planting it is necessary that the soil be well worked and thoroughly pulverized. It should be packed firmly about the roots, taking care to avoid all exposure. In view of the large variety of plants used for hedges and the various uses made of them we have, for convenience in getting descriptions, arranged and classified them in the following manner:

EVERGREEN HEDGE PLANTS

For Ornament

- Andromeda japonica*. See page 36.
Azalea amoena. See page 36.
Buxus suffruticosa (*Dwarf Box Bush*). See page 37.
Ilex crenata (*Japanese Holly*). See page 37.

For Windbreaks and Screens

- Picea excelsa* (*Norway Spruce*). See page 33.
Pinus austriaca (*Austrian Pine*). See page 34.
Pinus strobus (*White Pine*). See page 34.
Pinus sylvestris (*Scotch Pine*). See page 34.
Thuja occidentalis (*American arborvitæ*). See page 35.
Tsuga canadensis (*Hemlock Spruce*). See page 35.

DECIDUOUS HEDGE PLANTS

For Ornament

- Berberis thunbergii* (*Japanese Barberry*). See page 40.
Berberis vulgaris (*Common Barberry*). See page 40.
Crataegus coccinea (*Scarlet Thorn*). See page 41.
Deutzia. See page 41.
Gleditsia triacanthus (*Honey Locust*). See page 26.
Hibiscus (*Althea*). See page 43.
Hydrangea paniculata var. *grandiflora*. See page 43.
Ligustrum ibota. See page 44.
Ligustrum ibota var. *regelianum*. See page 44.
Ligustrum ovalifolium (*California Privet*). See page 44.
Rosa rugosa (*Japanese Rose*). See page 63.
Spiraea. See page 46.
Syringa (*Lilac*). See pages 46-47.
Viburnum plicatum (*Japanese Snowball*). See page 47.

Special Prices quoted on large quantities

Ornamental Reeds and Grasses

THESE are very effective for bedding purposes and all are exceedingly graceful, having large plummy heads. Their beauty and great value are only evident when planted in masses. They are perennial and their beauty is enhanced year by year. Strong and rapid growers, almost any soil will answer. We can heartily recommend them as being very effective.

Prices: Strong clumps, 25 cts. each; \$2.50 per doz.; \$15.00 per 100.

Arundo Donax (*Great Reed*). One of the most valuable reeds, growing from 10 to 15 feet high. Invaluable for creating a tropical effect in the garden. One of the most effective tall growing plants.

Arundo Donax var. *variegata*. Similar to the preceding; leaves beautifully striped with white; 6 to 8 feet high.

ERIANTHUS ruvennae (*Plume Grass*, or *Hardy Pampas*). Greatly resembles pampas grass, but blooms more abundantly; attains a height of from 9 to 12 feet; perfectly hardy and valuable for decoration of lawn.

EULALIA gracillima univittata (*Japan Rush*). A handsome ornamental variety with narrow graceful foliage; very valuable; 4 feet.

E. japonica variegata. Similar to the type with handsome variegated leaves; 4 feet.

E. japonica var. *zebrina*. Similar to the type, except that the foliage is marked crosswise with bands of white and green; one of the most striking and ornamental of all grasses.

GYNERIUM argenteum (*Pampas Grass*). Grows from 9 to 12 feet high, frequently throwing up from 30 to 50 flower spikes.

ORNAMENTAL GRASS (*Eulalia gracillima*)

AN OLD-FASHIONED GARDEN OF PERENNIALS. (Note the Sun Dial and Pergola)

Hardy Perennial Plants

GIVE great satisfaction when used for borders—along the front of shrubberies—along driveways and walks, or planted in masses on lawns, because being perennial they do not require replanting each season. Once planted they give but little trouble. When the foliage dies or is killed by frost their usefulness is not ended, for they will appear each spring with greater strength and beauty. They are the old-fashioned garden plants of our grandmothers, always beautiful, always entitled to our most affectionate regard, making our homes more attractive. They hold a strong place in the hearts of all plant lovers and should be planted generously. They combine diversity of foliage and great variety in form and color, while many varieties are excellent for cutting.

Prices, except where otherwise noted, 15 cts. each; \$1.50 per doz.

ACHILLEA millefolium roseum (*Rosy Milfoil*).
Flowers rose-colored. 12 to 18 inches.

A. ptarmica fl. pl. (*The Pearl*). Pure white; flowers in great profusion all summer; fine for cutting. 18 to 24 inches.

A. tomentosum. Dwarf habit; bright yellow flower heads. Fine for rockery.

ANCHUSA dropmore variety. True. The most important blue-flowered hardy border plant we have. It is a strong, vigorous growing plant of branching habit and perfectly hardy. It grows to a height of 3 feet the first season planted, making a stout bush that is literally covered with *purest blue* flowers, one inch in diameter, during June and July. 40 cts. each; \$4 per doz.

ANEMONE (*Wind Flower*). These are without doubt among the very best of our hardy perennials, the Japonica varieties, beginning to bloom in August and continuing until cut down by frost.

They are very useful for cutting, one of the best plants for massing, doing well in most any position. The spring flowering varieties are among the handsomest plants for the border and rockery.

A. japonica alba. Fine, large, white flower; September to November.

A. japonica. Semi-double, carmine with yellow center.

A. japonica (*Queen Charlotte*). Flowers a beautiful and pleasing shade of pink, semi-double, very large; fine for cutting.

A. pennsylvanica. The prettiest of our native wind flowers; large white flowers in profusion. 12 inches high; June to August.

AQUILEGIA vulgaris (*Old-fashioned Columbine*). Flowers double and single, in all colors; spring and early summer.

LARKSPURS (*Delphinium*)

CHRYSANTHEMUM maximum ("Triumph" Ox-eye Daisy). Strong growing perennial, about 2 feet in height; bushy plants which continue in full bloom from July until late in October; flowers are daisy-like, 3 to 4 inches in diameter, pure white with yellow center, and have great lasting qualities.

COREOPSIS tickseed grandiflora. A free flowering, desirable species, with rich golden yellow flowers in profusion, early in summer until fall. 18 inches.

DELPHINIUM (HARDY LARKSPUR)

A most important and satisfactory tall-growing, showy plant for the garden, producing long spikes of flowers, varying in color from light to dark blue, all summer.

DELPHINIUM chinensis. A fine variety of flowers, light and dark blue; 18 inches; July and August.

D. sulphureum. Sulphur yellow flowers, beautiful and distinct. 25 cts. each; \$2.50 per doz.

DIANTHUS barbatus (*Sweet William*). Flowers variable in color, in flat heads; an old-fashioned favorite.

D. plumarius (*Hardy Pinks*). These are the old favorites, bearing sweet, clove-scented flowers in May and June.

DIGITALIS (FOXGLOVE)

A genus of very showy, hardy plants, flowering in long terminal racemes, flowers tubular, funnel-shaped, thriving in any ordinary soil.

DIGITALIS ambigua (or *Grandiflora*). Showy light yellow flowers, veined brown; July and August; 2 to 3 feet.

D. gloxinaeflora. A very ornamental plant; the color of the flowers varies from pure white to deep pink; 3 to 4 feet; June and July.

D. siberica. Flowers creamy white with brown spots, of good size, on dense spikes; 2 to 3 feet high; distinct.

D. purpurea (*Common Foxglove*). Flowers purple-spotted.

FUNKIA fortunei maculata (*Plantain Lily*). Foliage broadly marked bluish green and yellow; lilac flowers. 35 cts. each; \$3.50 per doz.

GAILLARDIA grandiflora (*Blanket Flower*). One of the most effective and showiest hardy flowering plants, with gorgeous flowers of bright yellow and orange, with deep crimson centers, blooming from early summer until late autumn.

HELLEBORUS niger (*True Christmas Rose*). Flowers of pure white, like a single rose, valuable and interesting on account of their flowering season, which extends through the winter and spring months. 35 cts. each; \$3.50 per doz.

HIBISCUS moscheutos var. (*Crimson Eye*). Immense white flowers, with deep crimson center. 20 cts. each; \$2 per doz.

H. moscheutos (*Swamp Rose Mallow*). Flowers light rosy red with darker center; flowers 6 inches in diameter. 20 cts. each; \$2 per doz.

HOLLYHOCKS.

H. Double. All colors.

H. Single. All colors.

HYPERICUM moserianum (*Gold Flower*). A beautiful, somewhat shrubby plant of dwarf habit, with pretty, single rose-like, deep yellow flowers in profusion during the entire summer. 25 cts. each; \$2.50 per doz.

IBERIS sempervirens (*Hardy Candytuft*). A double flower; heads of pure white; flowers in great profusion in April and May.

I. sempervirens fl. pl. A double-flowering variety of the preceding. 25 cts. each; \$2.50 per doz.

IRIS: IRIS GERMANICA

GERMAN IRIS OR FLEUR-DE-LIS

Every garden and border should have a liberal planting of these beautiful plants, of which we have a great variety. All colors.

JAPAN IRIS: IRIS KAEMPFERI

Flowers of immense size, rich colorings and markings; they delight in a rich, deep soil and plenty of moisture; 50 named varieties. 25 cts. each; \$2.50 per doz.

I. K. Beauty. Lavender, yellow and white.

I. K. Fairy. Dark purple; early.

I. K. Paragon. White; very large and fine.

I. K. Royal Rose. Rose-edged white.

I. K. Silver Cloud. White and lavender.

LAVENDULA vera (*Sweet Lavender*). Plants with gray green leaves and spikes of blue flowers, pleasantly fragrant; 1 to 2 feet. 20 cts. each; \$2 per doz.

HERBACEOUS PAEONIES

Chinensis, Chinese Paeony

It is surprising that so noble a flower, almost rivaling the rose in brilliancy of color and perfection of bloom, and the rhododendron in stately growth, should be so neglected. Amateurs seem to have lost sight of the many improved varieties introduced within the last few years, and our finest gardens, perfect in other respects, are singularly deficient in specimens of the newer kinds. The first point in their favor is hardiness. In the severest climates the plants require no other protection than they afford themselves. Then their vigorous habit and healthy growth, freedom from all diseases and insects are important points in favor of their cultivation. Each succeeding year adds to their size and beauty.

The Paeony has not been planted enough in the past. Realizing this, we have employed Paeony experts both here and abroad to select the most beautiful and hardiest varieties for American culture. We mention the following eighteen varieties and recommend them to you as the ne-plus-ultra of all varieties of Paeonies yet offered. Each plant will be true to name and color.

Varieties: 35 cts. each; \$3.50 per doz. (except where otherwise noted.)

WHITE—Festiva Maxima—Rose type, very large, pure white, flecked with carmine, medium early, fragrant, free flowering. Price, 75 cts. each; \$6 per doz.

Duchesse de Nemours—Crown type, medium large, pure white, early, two days earlier than Festiva Maxima. Fragrant. Price, 50 cts. each; \$4 per doz.

Mad. de Varneville—Bomb type, large, very full, pure white, carmine-tipped central petals, early, fragrant.

PINK—Agida—Semi-double type, medium size, violet rose, early blooming, free flowering.

Edulis Superba—Crown type, rather flat, large, mauve (dark pink), early, odor pleasant.

L'Indispensable—Bomb type, large, lilac white changing to violet rose, medium early, free blooming.

PAEONIA FESTIVA

Mme. Calet—Rose type, large, pale hydrangea, pink, early, fragrant, free flowering. Indispensable.

Queen Victoria—Bomb type, medium size, Tyrian rose, silver tipped, mid season, fragrant, free blooming.

RED—Louis Van Houtte—Semi-double type, medium size, rosy magenta (dark red), fragrant.

Reubens—Single type, medium large, very dark crimson, late, fragrant. Extra good.

Marechal McMahon—Bomb type, large, dark red, mid-season.

Rubra Triumphans—Semi-double type, large, dark crimson, fragrant, free flowering.

Meisfoner—Bomb type, medium size, reddish purple, mid-season, fragrant, free flowering.

L'Eclants—Bomb type, very large, Tyrian rose (brilliant red), mid-season.

YELLOW—Canari—Bomb type, medium size, yellowish, late, fragrant, medium bloomer. Superb variety. Price, 75 cts. each; \$6 per doz.

CREAMY—Duc of Wellington—Bomb type, large, white with sulphur center, very fragrant, very free blooming. Extra good. Price, 50 cts. each; \$5 per doz.

LILAC—Pink. Berlioz—Rose type, large, rosy magenta, mid-season to late.

Charlemagne—Rose type, large, lilac with bluish center, late, fragrant.

Delachei—Rose type, large, rosy, magenta, late, very free. Extra good variety.

OUR GOLDEN ANNIVERSARY COLLECTION, \$5

For this collection we have selected twelve of the choicest varieties, each one of superb beauty, including Festiva Maxima, Duchess de Nemours and Madam Calet. For those who desire an exquisite display, this collection surpasses anything heretofore offered, the varieties being among those selected by the International Gardeners for planting in the Royal Gardens at Corinth.

12 varieties, \$5.

PAEONIA OFFICINALIS

They rival the rose in coloring and fragrance, the old-fashioned paeony so much loved by our grandmothers.

40 cts. each; \$3.50 per doz.; \$25 per 100.

PAEONIA officinalis rubra. This is the deep crimson variety so much admired; blooms ten days ahead of other varieties. Very fragrant.

P. officinalis rosea superba. Light rose, double flower; fragrant.

P. tenifolia. Single flower, rich red; exquisite fringe-leaved foliage.

Paeonia moutan (*Tree Paeonia*). A shrub, and one of the finest plants available for the garden. \$1 each; \$10 per doz.

PAPAVER nudicaule (*Iceland Poppy*). A beautiful class of hardy poppies, bearing elegant cup-shaped flowers, on stems a foot long, ranging in color from pure white and yellow to deep orange-scarlet.

Var. orientalis (*Oriental Poppy*). Showy perennials with immense scarlet and red flowers, 6 inches in diameter, on long stems, borne well above the foliage, in June. 25 cts. each; \$2 per doz.

PHLOXES

NEW DWARF, LARGE-FLOWERED

The new dwarf, large-flowered perennial phloxes have been so improved that they are now attracting the attention they deserve, and we know of no other class of hardy plants which will give so much satisfaction. They flower early in July, blooming the entire summer, in large clusters or panicles, in many shades of pleasing colors, both "self" and variegated. They deserve, and do best, in rich soil, in full sunlight. They are entirely hardy, and increase in beauty and vigor from year to year, being improved by occasional transplanting. Below we give a grand assortment, the cream of a large collection.

Prices of all Phlox, strong 2 year, 20 cts. each; \$2 per doz.; \$15 per 100.

Aurore. Flowers large, of a coppery orange color; rich crimson center.

Coquelicot. Crimson-scarlet, striking and exceedingly attractive; extra.

Eclaireur. Large carmine-rose, center shaded white. First in flower.

Feu de Bengal. Deep, fiery red; very showy.

Hercule. Deep carmine, crimson eye; large.

Lustre. Soft rose-pink, large crimson center.

Miss T. Levavasseur. White, tinted rose and marbled crimson; superior.

Neptune. A pure self-pink. Favorite color.

Pacher. Pure pink. Flowers large.

Pluton. Purple-crimson; truss large.

Purite. Pure white; large open truss; grand habit; best white we have yet seen.

PHLOX

Rosetta. Large rose, shaded white center.

Phlox subulata (*Ground or Moss Pink*). An early spring flowering type of phlox with neat, moss-like foliage growing close to the ground, which during the flowering season is completely hidden under a mass of bloom. Fine for the rockery, or for carpeting the ground in front of the shrubberies.

PRIMULA auricula (*Primrose*). An old-fashioned favorite but of late years fallen into much neglect, it is now, however, regaining enthusiastic admirers; mixed colors.

P. veris superba (*Giant Cowslip*). A large flowered form; the individual florets are from 1 to 2 inches across in large trusses of a bright canary yellow, on stems.

PYRETHRUM (*Feverfew*). Flowers similar to double asters, ranging in color from pure white and various shades of pink and red; fine for cutting.

RUDBECKIA (*Golden Glow*). So well known it needs no description.

TRITOMA pfitzerii (*The Ever-blooming Flame Flower*). The freest flowering variety in cultivation, with spikes from 3 to 4 feet high and heads of bloom over 12 inches long, of a rich orange-scarlet; needs protection in winter. 20 cts. each; \$2 per doz.

VINCA minor (*Periwinkle, or Trailing Myrtle*). A blue flowering trailing evergreen, excellent for carpeting the ground under trees where grass will not grow.

Hardy Rose Gardens

"It tossed its head at the wooing breeze;
And the sun, like a bashful swain,
Beamed on it through the swaying trees
With a passion all in vain,—
For my rose laughed in crimson glee,
And hid in the leaves in wait for me."
—James Whitcomb Riley.

It would be impossible to exaggerate the beauty of the rose. The very name suggests beauty and fragrance. It is the flower we love the best and deserves all the affection and care we bestow upon it. To have roses all summer is now a possibility, even with but a small garden. Our list comprises reliable, hardy varieties, producing a large range of colors, which will bloom from spring till November. It is a question of careful selection and we will gladly assist you.

Prices, except where otherwise noted, 35 cts. each; \$3.50 per doz.; \$25 per 100.

Rose Gardens for Rose Lovers

Until within the last few years rose culture, as applied to rose gardens, can hardly be said to have found itself, but a splendid beginning has been made and we devote special attention to the designing and planting of rose gardens. A warm, sunny spot, protected from storms and bleak winds, is necessary to secure the best results. Hedges and shrubberies afford an ideal shelter, but should not be near enough to rob the roses of nourishment. A strong, rich clay or loam, well drained, bountifully enriched, together with the proper selection of varieties, will insure beauty and fragrance in abundance. We are pleased to answer all inquiries promptly and to give such information as may be needed.

HYBRID PERPETUALS

A large group of hardy, strong growers, comprising all shades, the most beautiful in cultivation, easy of culture, the most popular and reliable for the multitude of planters. Most of the varieties listed are grown on their own roots.

Alfred Colomb. Brilliant carmine-crimson; large, globular. Very fragrant.

Anne de Diesbach (*Glory of France*). Carmine; large, hardy and fragrant.

American Beauty. Large, globular; deep pink, shaded with carmine; delicious odor; has proved to be a most desirable variety for forcing in greenhouses.

Caroline de Sansal. Clear, delicate flesh color; fine form, a strong grower, and one of the best of its color.

Captain Hayward. Bright scarlet; blooms all summer; very fragrant.

Clio. Flesh color with rosy pink center; fine globular form; strong grower; handsome foliage.

Coquette des Blanches. Pure white, sometimes faintly tinged with pink; blooms profusely all summer.

Earl of Dufferin. Rich crimson, shaded with dark maroon; large flower.

Fisher Holmes. Rich, velvety-crimson-carmine. Fragrant.

Frau Karl Druschki. Fine white; large, perfect flower; strong grower.

General Jacqueminot. Brilliant crimson; one of the handsomest and most showy roses of this color; beautiful in the bud. A fine free growth; a universal favorite.

Hugh Dickson. Brilliant crimson. Fine form; fragrant.

Mabel Morrison. Pure white, tinged with pink; profuse bloomer.

Madame Gabriel Luizet. Extra large, coral pink; fragrant.

ROSES (Continued)

Madame Edward Herriott (*The Daily Mail Rose*).

Winner of the gold cup which was offered by the London Daily Mail for the best new rose exhibited at the International Horticultural Exhibition held in London, England, May, 1912. The plant is a strong, vigorous grower, of spreading, branching habit, with numerous long thorns and bronzy-green foliage. Buds coral-red, shaded with yellow at the base, the open flowers of medium size, semi-double, are of a superb coral-red, shaded with yellow and bright rosy-scarlet, passing to shrimp red. This is the most sensational rose introduced in years. Strong, two year, field grown plants, \$1 each; \$8 per doz.

Magna Charta. Bright pink, carmine; fragrant.

Marchioness of Lorne. Rich rose, shaded with carmine.

Margaret Dickson. Pure waxy-white, very large, magnificent form; exquisite.

Marshall P. Wilder. Cherry-carmine; large, full flower; vigorous grower.

Mrs. John Laing. Delicate pink; large, full; fragrant.

Mrs. R. G. Sharman-Crawford. Deep, rosy pink, outer petals pale flesh; large.

Paul Neyron. This magnificent rose is by far the largest variety in cultivation; very double and full, of a beautiful deep rose color, and delightfully fragrant.

Persian Yellow. Deep, bright yellow; small, but handsome; a very early bloomer.

Prince Camille de Rohan. Deep velvety crimson, one of the darkest.

Soleil d'Or, or Golden Sun. Its growth is robust, making plants 3 feet in height; flowers large, full and globular; fragrant; color superb; reddish gold, shaded with nasturtium red.

Ulrich Brunner. A superb rose; extra large, bold flowers; rich, glowing crimson, elegantly lighted with scarlet; fragrant.

TEA AND HYBRID TEA ROSES

Prices, except as otherwise noted, 50 cts. each;
\$4.50 per doz.

Valued especially for their free and continuous blooming qualities, having their brightest colors in autumn, and particularly useful for their supply of cut flowers. Strong, field grown 2 year plants.

Captain Christy. Very large, double flowers; lovely peach, deepening to rosy crimson; constant bloomer.

Caroline Testout. Large, double, bright rose; very sweet; sturdy habit, free flowering.

Etoile de France. Velvety crimson, stiff, erect stems; fragrant.

Etoile de Lyon. Rich golden yellow; beautiful form, hardy.

Glorie Lyonnaise. White; blooms with utmost freedom; massive flowers on stiff stems.

Gruss An Teplitz. See page 63.

Hermosa. Bright rose; a most constant bloomer; one of the oldest and best.

Jonkheer J. L. Mock. This grand rose is the strongest-growing in the Hybrid Tea class. The blooms, which are produced with the greatest freedom, are carried on stiff and erect stems, and are of the largest size, of perfect formation and highly perfumed. Color clear imperial-pink; a glorious flower. Awarded two gold medals, one silver medal and five first prizes in Europe. The

largest flowers of all Hybrid Teas. Two year, strong, field grown, \$1 each; \$8 per doz.

Kaiserin Augusta Victoria. White, creamy; full and double; fragrant; a delightful variety.

Killarney. Color flesh, suffused with pink; blooms continuously.

La France. Delicate silvery rose, shaded with cerise pink, often silvery pink. Very large, double and superb form. Flowers continuously throughout the season. None can surpass the delicacy of its coloring; in fragrance, incomparable; in form, perfect. Sweetest and most useful of all roses.

Maman Cochet. Flowers large, full carmine-rose, shaded with yellow; very desirable; blooms till late November.

Mildred Grant (Alex. Dickson, 1901). Awarded the gold medal of N. R. S. Ivory-white, with an occasional flush of pale peach. High pointed center, with unusually large and massive petals, opening to perfectly formed flowers of enormous size and substance. Impossible to describe its exquisite beauty. Our first offering of strong plants, \$1 each; \$10 per doz.

Papa Gontier. Rose, shaded yellow; large, free blooming; fragrant.

Radiance. A superior Hybrid Tea of American Birth. Brilliant rosy carmine, shaded with rich opaline tints in the open flower which is large, of fine form, with cupped petals. The open rose has almost the fine form of the La France, while in the bud stage the form shows great elegance. Constant bloomer, delightfully fragrant. Foliage is a deep rich green, healthy, and there is plenty of it.

In addition to its being a vigorous grower, the growth of the rose is branching, and each branch terminates in one or more flowers. There can be

FRAU KARL DRUSCHKI, OR SNOW QUEEN
(See Page 59)

ROSES (Continued)

no question that this rose is among the half dozen best roses now known in the U. S.

After the usual severe tests accorded to Roses submitted to it, the American Rose Society in 1914, gave to the Radiance its **Silver Medal**. This is the highest honor that can be paid in America to any rose, and no garden rose ever had higher honors.

Since its introduction Radiance has had extended trial in all sections of the country, and we do not hesitate to recommend it as superior in every way.

We are describing the Rose very fully, in response to questions asked us by intending planters. See catalogue cover, for the beautiful illustration of this beautiful Rose.

Price for strong, 2 yr. plants, field grown, \$1 each; \$9 per doz.

Sunset. Rich tawny shade of saffron; handsome; free bloomer.

The Bride. A lovely, pure white tea rose of large size. Admirable for forcing as well as for summer flowering. The buds have more substance than Niphetos, are full and double, and possess the good characteristics of Catharine Mermet.

White Maman Cochet. White, occasionally tinged with blush.

MOSS ROSES

The charm of the moss rose is the bud. They are favorites with everyone, being invaluable for bouquets and cut flowers.

Comtesse de Murinais. Pure white; large, fine.

Crested. Deep pink buds, surrounded with mossy fringe and crest; beautiful.

Salet. A vigorous, perpetual bloomer. Light rose, large, full. A true perpetual moss, blooming at intervals from June to November.

White Bath. White, tinged with flesh; attractive in bud and open flower; by far the best white moss.

DAMASK ROSES

Madam Plantier. Pure white; very hardy and reliable; profuse bloomer in June.

York and Lancaster. New and rare. A remarkable variety; hardy; free bloomer, noted for its fragrance and beauty. Color white, striped and splashed and dashed with crimson-purple. An elegant variety.

PENZANCE, SWEET BRIER ROSES

Extremely fragrant single flowers with beautiful tints and sweetly scented foliage.

Lady Penzance. Fragrant; soft shade of ecru.

Lord Penzance. Very fragrant; lemon-yellow; robust grower.

POLYANTHA ROSES

Baby Rambler

The Polyanthas are a charming class of ever-blooming roses of a dwarf, bushy habit. Flowers are double and delightfully fragrant, and are borne in large clusters, the whole plant frequently being covered with a mass of bloom from June till late November. They are very useful for general planting and for edging beds and borders of the stronger-growing varieties.

50 cts. each; \$4 per doz.; \$30 per 100.

Baby Dorothy. The greatest novelty in new roses for the garden. Rapid grower, attaining a height of 20 inches; foliage a bright clear green, which does not mildew. It flowers in large pink pani-

DOROTHY PERKINS, FRAGRANT. (See Page 62)

cles, and has many flowers in the cluster. Perfectly hardy. Received the Gold Medal in France.

Baby Rambler. (Syn., *Dwarf Crimson Rambler*, *Norbert Levavasseur*). A compact new dwarf variety that does not exceed 18 inches in height, covered with a wealth of crimson flowers that last a long time.

Pink Baby Rambler (*Anny Muller*). This we consider a remarkable variety, and one of the very best dwarf bedding garden roses. It is perfectly hardy, and is a grand bloomer, being always in bloom from June till late November. It is a pleasing color, a brilliant luminous pink and attracts the eye at once. It is a good grower, effective, and worthy of great praise.

BABY ANNY MULLER
Superb for Bedding and Borders

POLYANTHA ROSES (Continued)

White Baby Rambler (*Catherine Zeimet*). This is, as yet, the only white rose introduced in Europe. It has proved to be perfectly hardy, a great point for a white rose, and is a constant bloomer. It blooms in large fragrant clusters and when in flower, a bed of them at a distance looks as if the ground were covered with snow.

CLIMBING MOSS

AN ENTIRELY NEW FAMILY OF ROSES

Wichmoss, or "Baby Moss." This is a wonderful break in new roses, being a cross between the "Wichuraiana" and "Moss Rose." It has retained the scandent habit of the "Wichuraiana," making long growths five to eight feet in length with the glazed resistant foliage, while the bud is heavily mossed in bright green and has the peculiar aromatic odor of the moss family. The flowers are borne in clusters that are a day-break-pink in color, opening into bloom that is a good semi-double in fullness. A climbing moss is a wonder, and "Wichmoss" is the forerunner of an entirely new family of roses; hardy. Strong, two year, field grown, \$1.50 each.

HARDY CLIMBING ROSES

Make home more sweet and home-like with their beauty and fragrance. Do not fail to plant at least a few where they may be seen when you rise in the morning, and the days will be brighter. Our collection is unsurpassed even in Europe.

They are all hardy, vigorous and of rapid growth. They bloom profusely and require very little pruning and no protection.

American Pillar (*New*). An American seedling of great merit. Color a chaste shade of pink, with large white eye and bright yellow stamens; flowers very large, single and borne in immense clusters; these are followed in the autumn by pretty, brilliant red seed berries. A tremendous grower, with its thick, vigorous canes, it is without doubt one of the most valuable single climbing roses in existence. Strong 2-year plants, 75 cts. each.

Climbing American Beauty (*New*). A cross between an unnamed seedling and the grand old American Beauty. *Of same color, size and fragrance* as its pollen parent with the addition of the climbing habit; good foliage and better blooming quality. It is perfectly hardy. \$1 each; \$10 per doz.

Crimson Rambler. A remarkable rose from Japan; very popular; vigorous, often growing 10 to 18 feet the first season; a splendid climber and unequaled as a pillar rose tied to a stake; brilliant flowers in immense masses, holding their color for a long time. Words fail to do it justice. Our Mr. John G. Glen found this rose in England in 1892, since which time we have sold nearly half a million plants. 2-year heavy, field-grown, 35 cts. each; \$3 per doz.; \$18 per 100.

Cherokee. Flowers large and of a pure silvery white; center full of bright yellow stamens; very charming and attractive.

Dorothy Perkins. This magnificent variety is the result of a cross of Wichuraiana with that grand old rose, Madam Gabriel Luizet. It is perfectly hardy, having withstood a temperature of 20 degrees below zero, and with no snowfall to protect. The flowers are a large size for this class of rose, and are borne in clusters of from 10 to 30. Color, clear shell-pink; does not fade, and is very fragrant, a quality not often possessed by other climbing roses.

Excelsa (*Red Dorothy Perkins*). It is a good deal to claim for a rose, but we are within bounds when we describe Excelsa as a brilliant Crimson Rambler flower on glossy, varnished Wichuraiana foliage. The infusion of Wichuraiana blood assures an ornamental climber which is nearly evergreen. The flowers are very double, produced in large trusses of thirty to forty, and almost every eye on a shoot produces clusters of flowers. The color is intense crimson-maroon, the tips of the petals tinged with scarlet. \$1 each; \$8 per doz.

Flower of Fairfield (*New*). A sport from the notable Crimson Rambler, which it resembles in every respect, except that it continues to bloom all summer, producing a marvelous succession of brilliant crimson clusters from early spring till late autumn. Strong, 2-year-old, field-grown plants, that have bloomed in the nursery row, 50 cts. each; \$5 per doz.

CLIMBING ROSES (Continued)

Tausendschoen (*Thousand Beauties*). A superb new rose. Blooms profusely from early June until August, the flowers appearing in immense clusters of large size, and double. The colors vary from a soft rose through the shades of carmine, white, yellow and other delicate tints. It is a strong grower and its magnificent foliage is of itself a valuable feature. Strong 2-year-old plants, on own roots, 50 cts. each; \$4 per doz.

Gem of the Prairie. Carmine-crimson, occasionally blotched with white.

Greville, or Seven Sisters. Crimson, changes to blush; flowers in large clusters.

Pink Rambler. Resembles Crimson Rambler in every respect but color, which is clear pink. One of the most attractive. The mature buds often change to creamy white.

Queen of the Prairie. Bright rosy red, frequently striped white; large globular.

Wichuraiana (*Memorial Rose*). A low, trailing species, its stems creeping on the earth almost as closely as the ivy. The white flowers are produced in the greatest profusion.

GRUSS AN TEPLITZ

White Rambler. A remarkably free bloomer, producing medium-sized pure white flowers in large clusters.

William C. Egan. New climbing rose. Flowers large, very full, in color resembling Souv. de la Malmaison, and produced in clusters. It remains in flower several weeks. The habit of the plant is sub-climbing; foliage bright and glossy.

Yellow Rambler. Deep yellow flowers. Same characteristics as Crimson Rambler.

TREE ROSES

The choicest of the H. P. varieties as described on pages 59 and 60, grown in tree form, 4 to 5 feet in height, are surpassingly beautiful when covered

with superb double flowers. Grafted on Rosa Rugosa and Cinnamomea stocks are very hardy, and are in great demand for the formal and the "old-fashioned garden."

\$1 each; \$10 per doz.

BUSH ROSES

With red fruits in winter

Although unsuitable for planting in beds because they grow too large, they are very effective in groups and masses and also in shrubbery plantings.

Conrad F. Meyer. Splendid, large, elegantly formed buds and flowers, 3½ to 4 inches across and perfectly double, succeeded by red berries; color, rich peachy yellow, delicately tinged with silver rose; very fragrant; entirely hardy and valuable in every way.

Madame George Bruant. A seedling from the Japan rose, Rosa Rugosa, and the tea rose, Sombreuil. From these it gets its exquisite sweetness and its ever-blooming character. Considered by the best judges to be of great value.

Rosa Rugosa Rubra (*Japan Rose*). This beautiful race of roses was first introduced by Commodore Perry. Grows 4 to 5 feet high; beautiful, large glossy foliage, distinctly wrinkled; flowers are red, 3 inches across, produced in terminal clusters of 10 to 20 flowers, and bloom all season, succeeded by large, orange-scarlet fruits which remain all winter beautifying the winter landscape. Very desirable for mass planting and for hedges.

Rugosa Alba. Single, pure white flowers of 5 petals; highly scented; produces yellow berries.

Sir Thomas Lipton. Flowers double; the best white variety; very fragrant; the blossoms are borne on long stems all summer. Perfectly hardy, a strong, vigorous grower. Superb for hedging and should be included in every group of shrubbery.

GRUSS AN TEPLITZ

(Crimson Hermosa)

BEDDING ROSE

It is impossible in a printed description to give any adequate idea of the magnificent beauty of this rose, when used as a bedding rose. It is the richest of all red roses and for the amateur who is without a greenhouse, it is one of the most desirable varieties introduced. The foliage is exceedingly beautiful, the young growth being of a dark, rich bronze color. The flower, in color, is a dark, rich scarlet, shading into a velvety crimson as the flowers mature. Larger than Hermosa; very fragrant; strong grower, and blooms profusely. When planted in beds it creates a sheet of the richest crimson scarlet all summer. We offer 2-year-old, field-grown, blooming plants, 40 cts. each; \$3.50 per doz.; \$25 per 100.

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THESE PICTURES TELL A STORY COMPLETE

Taken four years apart, they show what well-arranged planting of judiciously selected nursery stock can do in making the home a part of the landscape. Beautiful home surroundings cannot be attained by "hit-or-miss" planting. It is just as much the work of an expert to select shrubs and trees for specific purposes and locations, as the work of an architect is required to plan the home. Tastefully planned and carefully planted home grounds need not necessarily be expensive.

OUR LANDSCAPE DEPARTMENT AT YOUR SERVICE

Our staff of experts is doing this kind of work every day. Many years of practical experience help them determine how to plan home grounds the one best way. Oftentimes, seeming disadvantages may be turned into attractive plantings at comparatively slight cost. We aim not to destroy and replant, but rather to supplement and complement the work already done by nature.

To help you to a thorough understanding of our aims and efforts in this work, full details are gladly sent upon request. A few lines from you will bring our terms and rates, also estimates for work according to specifications.

A SYRINGA (LILAC) GARDEN - FRAGRANCE AND BEAUTY UNSURPASSED
SEE PAGE 46-7