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BLUE GRASS NURSERIES

H. F. HILLENMEYER & SONS

LEXINGTON, KENTUCKY.

FALL 1921

SPRING 1922

In 1841 stage-coaches, oxen, tallow candles and quills were the necessities of their time. Pullmans, automobiles, tractors, telephones, typewriters, and electric lights were perhaps not dreamed of—and through these years of advancement, we have been here in the nursery business.

These years of experience have been worth much to us. What should they be worth to you? If you contemplate buying nursery stock, they are worth something to you.

Showing *Spirea Van Houttei* in its natural grace and beauty as a foundation plant.

To Each Patron, Old and New

We take pleasure in presenting this new descriptive catalogue and price list for fall 1921, spring 1922. Eighty years of nursery practice and service finds the third generation of our family actively engaged in the work so ably done by our predecessors. From a very humble beginning we have developed in these years a large nursery, to which we devote considerable time, acreage, labor and equipment. This development has not been rapid nor phenomenal, but rather consistent. From its first conception those ethics of business were applied that gained for us a most favorable position in our state that we fully value. A firm's good will is a great asset in any business and particularly is it so where the purchaser is not a

judge of what he buys and must rely on the judgment, advice and responsibility of the one from whom he purchases.

This development has not come alone through our individual efforts. That support, confidence and expression of approval by our patrons who have recommended the dependability, quality and reliability of the service and stock we offer has enabled us to advance as we have. To those our old and pleased patrons we extend our heartfelt thanks.

To those new patrons we can only offer the testimony of those who have already dealt with us or solicit a trial order on the basis of our four-score years of consistent nursery practice.

H. F. HILLENMEYER & SONS.

Our Policies

AGENTS. We wish to state most emphatically that we have **NO AGENTS** representing our interests. We have been mis-represented so often that we want to impress it on the minds of every patron. Too often the public has been lead to believe many impossible things through representation by these transient tree peddlers. Unfortunately some vendors and growers of trees have been guilty of gross mal-practice. They promise more than they can deliver, they charge extraordinary prices for ordinary stock or cheap prices for worthless plants. Unsuitable varieties, super-sized fruits, ultra-productive plants, highly colored flowers, predigreed grown stock, extra hardy and sensational new varieties, other monstrosities, freaks and fads are sold that ultimately prove failures in every respect. Guarantee and promises may be had but with no means or character to substantiate such claims they are worthless. Their principal object is to collect the money, after which the agents frequently disappear. It is not our object to solicit business on the basis of the unreliability of others, but as we cannot sanction the means and methods frequently employed in soliciting orders, we have adopted a policy of no agents. We are responsible to you direct.

Replacements.

All the stock we sell is more or less of a perishable nature and for this reason we cannot guarantee it to grow. Delay in transit, improper care after receiving, undue exposure during planting, improper setting, failure to prune, impoverished or unadapted soils, disease and injury as well as subsequent care and at-

tention are all beyond our actual control; any one or a combination of these circumstances may cause a tree to die regardless of the vigor and vitality it may possess when shipped. If therefore by any chance the stock sent you is not received in good condition, please advise us at once as any adjustment or correction must be made promptly in order to ascertain the real cause of such complaint. Where the fault is ours we will replace on satisfactory representation within seven days after stock is received. No replacements of stock lost by forwarders can be made, although we pledge our assistance in the recovery of claim from the transportation companies.

Guarantee.

We exercise every care in propagation, digging and packing and believe every tree we send out to be true to name and description. In our many years of business we have had practically no replacements to do because of our care in filling all orders. **If however, there is a case of mis-labeling, we will on proper proof, replace such trees with ones of the correct variety or refund the original purchase price and beyond this we assume no responsibility.**

Substitution.

Very frequently we find a variety is exhausted and in such a case we invariably substitute the nearest variety marking same **true to name.** All order blanks have a space designated in which to mark in case no substitution will be permitted. Unless so instructed we will use our judgment in making any necessary changes.

Six Good Reasons Why You Should Buy of Us

1—Responsibility.

It is particularly appropriate to mention the reliability of Hillenmeyer's Blue Grass Nurseries. Eighty years of business association in this locality has brought to us the confidence of its business interests and citizenship. We refer you to any bank, business house or resident of our city or Central Kentucky.

2—Service.

We offer to every patron the benefit of our experience covering the products we sell. While our catalogue and literature gives some general instructions covering varieties, subsequent care and attention, we will gladly furnish more specific information when called on. This is free to every patron.

3—Prices.

As we grow most of our stock, have no agents nor middlemen to pay, we are in position to give value for value. We list only what we can ordinarily supply—and at a saving of a substantial per cent over those nurseries not so favorably situated.

4—Shipping Facilities.

Our location enables us to ship by express, parcel post, four railroads and as many inter-urban lines, insuring prompt delivery of our stock anywhere in the country. As nursery stock is perishable this competitive rapid service means much to every purchaser of our products.

5—Location.

We are in the heart of Kentucky's famous Blue Grass section, noted for its productiveness and fertility.

We are north of the great little city of Lexington. Take Georgetown road or trolley to sta-

tion 7, passing a branch nursery at this point you will come to our offices, packing and storage plant. Visitors and prospective patrons are invited. We have a particularly well adapted tract of land for nursery purposes, which combined with our experience enables us to grow high-qualified plants of every character.

6—Inspection.

We are annually inspected by the State Entomologist and a certificate covering the healthy condition of our stock will accompany every shipment. We are equipped to fumigate all plants that are likely to carry injurious insects or diseases.

Terms

Our terms are understood cash with order unless through other arrangement credit has been provided for. The prices quoted in this catalogue are net, except where credit is extended, a charge for packing, that is for time and material is added to the account. This discount for cash in all cases is very appreciable.

Parcel post charges are quoted after those articles that can be safely sent that way. Money must be sent with order to cover this. Practically all fruit trees are too large to meet postal requirements and parcel post orders must be confined to those items that carry parcel post delivery charges in the catalogue.

Prices do not always represent inherent value, for often the true worth of trees is embraced in the reputation of the nurseryman from whom you purchase.

General Planting Instructions

With each order sent, a small leaflet containing planting information is included, and this should be read carefully before trees are set. We find that a large percentage of loss is due to improper methods of handling nursery stock after it has been received. Nurserymen are often blamed for failures that should be right-

fully attributed to the carelessness on the part of the purchaser. Some cultural hints are also suggested under the general description of the varieties throughout this catalogue. Below is a general outline of how to plant. Unless you already know we suggest that you read same.

How To Make Trees Grow

1—Care of stock on arrival.

When trees are received, open the packages at once, shake out the packing materials, check up the order to insure correctness, then dip the roots in water or preferably thin mud, open the bundles and trench in the garden, covering roots well with soil. This soil should be made firm to insure contact with roots, restoring as near as possible natural conditions. If to be planted very soon, trees may be put into the cellar for a day, well watered and protected from the air.

2—Pruning.

Some pruning is required of all trees, not moved with balls of earth. This is a matter of judgment as no set or fast rules can be applied. Consider the two ideas or principles of pruning. First: To establish a balance between the tops and roots, as the latter have been cut and broken in digging the tree. Second: To regulate the shape of the tree and affect its growth. The general rule is to cut in the lateral branches about half way, especially with fruit trees. With shade trees, those of fast growth should be similarly treated while those of conical or very slow growth may be more advantageously pruned by removing the small inside branches and slight shortening of the terminals, striving to retain the natural contour of the tree.

Remove all label wires as they will cause permanent injury.

3—Planting.

Your holes should be staked out and dug prior to exposing the trees. The roots by all means should be protected carefully from the sun and drying winds as either will very soon wither the fibrous roots necessary for quick and vigorous growth. In digging the holes see that they are larger by 6 to 12 inches all around than the roots of the trees to be set in them, and deep enough to plant the trees as they formerly stood in the nursery row. A few inches of loose soil in the bottom of the holes proves helpful to early growth of the roots. In digging deep holes, the surface soil should be kept separate from the sub-soil and in planting, use the better soil in direct contact with the root system. Take out only what trees can be planted in a reasonable time.

Place the trees in these holes, roots spread out in their natural positions, and body slightly leaning to the Southwest in exposed locations, the best soil being filled in carefully between the fibrous roots and firmly tramped. Continue filling in and treading until near the level, and see that the last few inches are applied loose, so as to retain the rainfall and moisture. Never mound up the soil, as this tends to turn the water from the trees.

4—Mulching or Cultivation.

Mulching the trees with manure, leaves and similar materials tends to conserve the moisture, stops the encroachment of weeds and grass and prevents the cracking and baking of the soil, meanwhile adding fertility and insuring vigorous growth. Or cultivation should consist of shallow stirring of the soil at least as far extended as the root system of newly planted trees. This should be done after every rain as it keeps the soil free of weeds and retains the moisture.

5—Wrapping.

Wrapping the trees from the ground to the first branches with burlap or similar material, or the use of corn or tobacco stalks about the trunks of trees prevents the usual sunscald and scarring on the southwest side. Trees grown in the nursery do not get direct rays of the sun, and the bark is consequently tender.

Trees are of a perishable nature; actual and not "promised" attention after planting brings satisfactory results.

Improperly
Pruned and
Planted.

Properly
Pruned and
Planted.

Fruit Department

A Good Apple Orchard Is a Paying Investment.

This has been for years a most important feature of our nursery. A long experience in this section places us in a particularly advantageous position to suggest what to plant. Our catalogue of varieties shows those substantial and reliable sorts tried, tested and found satisfactory. Thousands of orchards are found today to bear this testimony and annually more are being planted.

The possibilities of orcharding are great, for the country is not developing a surplus of fruit neither is it being over-planted. Distribution to the consumer has proven the greatest cost to the grower. In every section, on every farm,

there is a suitable location for an orchard. These spots now unprofitable can be made to yield large returns. Quantity and quality will be the result of a few years of good and not necessarily expert attention. Rapid maturity and great harvests follow proper cultural methods.

Some of the common reasons for failure are: Unsatisfactory location, impoverished soil, unprepared areas, unsuited or too many varieties, unhealthy trees, poor planting, failure to prune at planting time, inability to mulch or cultivate as needed and the omitting of control methods for disease and insects.

Planting an Orchard

Location.

Select a site for your orchard on high ground, so as to escape the frequent late frosts that prove injurious in the low lands. Soil preparation in the way of crop rotation and added fertility prove good investments. If you have choice of exposure, a northern or western slope is preferred. Soil not robbed of its fertility, properly tilled and in a physical condition to receive a grain crop will produce much better results than when trees are set in impoverished fields, barren wastes, planted in "post holes" and no further attention given.

Two types of orchard are planted, commercial and home. The requisites of the former we will not mention here, except to say that we have too few. The planter is usually familiar with his conditions and at any time we will cheerfully give any advice that we can. The home orchard should be planted with an idea of a succession of fruit. An ideal selection as to season would be, 15 per cent summer, 25 per cent fall and 60 per cent winter varieties when applied to apples. Peach varieties that mature in mid-season and cherries of the earlier and sour types are suggested to predominate in a home orchard. The other fruits should be selected to meet individual requirements. Choose standard varieties or if not familiar with the names we will assist you. Then make a map of your orchard, so failures can be correctly replanted. Start nearest the home with the summer varieties, follow in succession with the fall and then plant the late maturing, as these should not contain many varieties but rather more trees of fewer sorts. The reason is obvious as picking, sorting, marketing and storing is made easier and more profitable.

For economy of space the "filler system" is frequently advisable, i. e. those trees that mature quickly can be planted between the permanent ones, the idea being to remove them when they have spent themselves or are crowding those of longer life. Peach especially are recommended though plum, some varieties of apples and cherries, may be used.

Planting.

Read carefully "How to Make Trees Grow" on page 3 and also special instructions on leaflet with shipping notice.

Cultivation.

Do not expect a tree to grow unless you can give it some subsequent attention after planting. Cultivate an orchard or tree just as you would a garden. It is a good practice to inter-crop, that is, between the rows of trees, low growing vegetables and berries may be planted without losing the use of the land and at the same time keeping the trees growing vigorously. Green manure crops, grain and legumes may be plowed in to further enrich the soil, care being taken not to injure the bodies of the trees when so doing.

Spraying.

This is not difficult but rather easy after understood. First: Figure out what you are spraying for, disease or insects, so it can be done intelligently. Second: Do a thorough job for time, material and results are wasted by carelessness of application.

Get a good sprayer (and there are lots of them), of a type suited to your needs, and here we might say the life of a sprayer will depend on the care you give it. When through using, wash and rinse thoroughly, drain out the hose and pipes and store out of the weather. For many parts are indestructible and will last for years. A spraying calendar on pages 46-47 and some instructions are given therein. Bulletins and further information may be had on inquiry.

Pruning.

For initial pruning note "How to Make Trees Grow" on page 3 and also the information in planting leaflets sent with each shipment. The general rules of pruning fruit trees are: To avoid all crotches and leave the branches evenly distributed along the main stem. Prune so an evenly balanced head will result. Branches should not be allowed to cross and chafe. Some shortening of the terminal growth on peach is necessary, remembering that an open type head should be developed, and that pruning is a matter of judgment, the object in this case being to regulate the shape of the tree and to encourage the production of fruit spurs. For this reason the promiscuous sawing and dehorning of trees is not advised but rather a careful study of the fundamental features and then proceeding along that line.

Winesap.

Apples

Owing to its adaptability to various soil conditions, its hardiness, productiveness, and commercial value, we must consider the apple the most important of our tree fruits. Planted only in well drained soil, with proper care taken in the selection of varieties one may expect fruit from early summer throughout the winter months. An acre or so devoted to apples, properly planted and with ordinary attention to pruning and cultivation will yield very satisfactory returns. Our list has been further reduced to only the most dependable sorts, and those listed below may be planted with confidence. As the trees develop the trimming out of the cross and crowded branches is all the pruning required.

When Planting Apple trees permit 3 to 5 well developed branches to remain, but shorten these to 6 or 8 inches.

Varieties may become exhausted, and if so we always substitute one variety of same season and color as near as possible. There will be a shortage of good apple trees this year.

	Each	10	100
Extra Size, 5-6 feet	\$0.65	\$6.00	\$50.00
Medium Size, 4-5 feet	.55	5.00	40.00

Early Apples

Astrachan. Early, red, crisp and tart, excellent for cooking. Perhaps the best extra early. Reliable.

Benoni. Attractive, red, best eating apple of its season. Early bearer and very productive.

Early Harvest. Pale yellow, sub-acid, regular bearer and is the most popular of the old general purpose varieties.

Early Transparent. Very early bearer, productive, valuable for either home or market. Blights on rich soil, however. Waxy yellow, tart, excellent.

Golden Sweet. The best Sweet we know. Yellow, vigorous grower, productive. Hasn't a fault. Fine.

Liveland. Succeeds everywhere. A very promising commercial and home variety. An extra early red variety.

Maiden's Blush. A grand old favorite. Waxy yellow, pleasing red blush. Ripens over a long period, making it valuable for an orchard.

Red June. Medium size, red, excellent quality, early bearer. Tree productive; not vigorous.

York Imperial Apple.

Fall Apples

Fallawater. Greenish-yellow, extra large and sub-acid. Tree vigorous, early and regular bearer. We consider it one of the best.

Grimes Golden. No orchard complete without it. Yellow, best quality and productive. For either home or market for this season there is nothing better.

Northern Spy. Large striped. Crisp, juicy, aromatic. Excellent quality. Long coming into bearing.

Greening (N. W.). Large pale yellowish-green. Very hardy and fine grower.

Rambo. An old favorite. Yellow shaded with red, medium size, tender and juicy. Supply limited.

Wolf River. Extra large, showy and productive. Hardy and regular.

"Early" Winter Apples

Baldwin. Red, large, fine quality, tree vigorous. The commercial apple of the east.

Delicious Red, large and uniform in size, distinct because of five lobes on blossom end. Variety new, very popular and no orchard should be without it. Quality unexcelled. A very early and heavy bearer, good for market and home. No new apple ever had such a promising future.

Black Twig A seedling of Winesap. Larger, splashed with red, sub-acid and very productive. We can especially recommend this for Kentucky. Valuable for home or market. Plant it.

Jonathan. An early bearing variety, red, medium size and quality very good. Tree never large but productive.

Kinaird. We consider this one of the best of the Winesap family. Larger than old Winesap, darker red and productive. Does not blight.

Milam. A standard for 50 years. Quality excellent, color red, size medium. Well known.

Rome Beauty Large red, tender and sub-acid, early bearer and productive. A commercial sort in most sections, and a very popular variety.

Stark. An apple overlooked by many. Color greenish-red, unattractive for market, but for productiveness, regularity, vigorous growth, etc., should be in every farmer's orchard.

Stayman Winesap Dark, rich red, indistinctly striped; larger than old Winesap. Tree productive and a drought resister.

Winesap Medium size, dark red, productive variety, excellent quality, crisp and juicy; sub-acid. The most extensively grown, the most abundant bearer, with more good qualities in its favor than anything we have to offer for Kentucky.

Wealthy. Large, shaded to dark red, quality good, tender and productive. Very early to bear and exceedingly promising.

Winter Banana. Quick maturing tree, bearing large yellowish fruit with blush. Flesh firm, flavor sub-acid and of excellent quality. A dessert apple. Very satisfactory.

"Late" Winters

Ben Davis. Striped red, large and attractive. Surest bearer, healthy tree, vigorous and should be planted as a "catch" in every orchard. Greatest fault lacks quality.

Gano. Very similar to Ben Davis, better quality. Commercial sort in Middle West.

Ingram. Red striped, juicy and productive. Very regular bearer and is an improved Janet. New and very good.

Janet (Rawles). Medium size, red-greenish apple, an old favorite, being subject to rot in humid seasons.

Romanite. Medium sized red, quality fair. Never misses a good crop and will keep until spring. Tree vigorous and healthy.

York Imperial A late keeping commercial variety, shaded red on yellowish skin, flesh firm and tree healthy. Regular and heavy bearer. Plant for profit or for home.

Crab Apples

Hyslop. Large, dark. Tree vigorous and productive.

Whitney. This is a really edible crab; late, and good for jelly or use from hand.

Stayman Apple.

Bartlett Pears.

Anjou (E). September 15. This is a fall variety, large, of good quality, yellow with blush. Quality especially good and succeeds everywhere. Free from blight and bears quite young.

Bartlett (E). August 15. This is no doubt the favorite eating pear offered today. It is large, beautiful yellow with soft blush. In quality it has no equal. The tree bears quite young and on account of its popularity everywhere it is the most sought after of the European pears.

Clapp's Favorite (E). August 1. This is a seedling of Bartlett and earlier ripening. It is lemon yellow in color with brown dots. In quality it is almost the equal of its parent. Ripens in early August.

Early Harvest (E). July 10. This is the earliest of the dependable pears. While the quality is not as good as some of the others of this group, because of its earliness and freedom from blight we consider it very valuable. The tree is decidedly upright grower and productive of large crops in few years after planting.

Howell (E). September 1. This is another dependable variety, fruit being yellow, large in size and of good quality. The tree is vigorous and bears rather early.

The Pear

The pear thrives in a rich deep soil and when given good attention after planting will yield very early. The quality of the European (E) variety is usually very high while the Japanese (J) varieties are usually more productive. The quality of the fruit, however, may be increased by picking before it is ripe and spreading them in thin layers on a floor until they become soft. The fruit left on the trees to mature usually lacks the properties of those that are house-ripened. Trees take up very little room and a few should be in every orchard or back yard.

The principal enemy to pear trees is the blight. This is a bacterial disease that at first appearance causes the terminals to wither and later die. Prune out below the injured part and burn all branches thus affected. Spraying will practically control this disease. Scalecide is considered the best for this purpose by many, although any of the fungicides will keep the disease in check. Luxuriant growth seems to be affected more quickly than slow maturing branches. At planting time prune to 3 to 5 well developed branches distributed evenly about the main stem. Shorten these to 6 or 8 inches.

	Each	10	100
Extra Size, 5-6 feet...	\$1.00	\$10.00	\$90.00
Medium Size, 4-5 feet...	.90	8.00	70.00

Kieffer (J). September 10-15. This today is the most popular pear for our section. On account of its productiveness and freedom from disease it stands out pre-eminently. The fruit is a large golden yellow sometimes tinted red on the sun exposed side. The flesh is very firm, crisp and juicy, and for canning purposes it is specially prized. From the tree it is not good to eat and to properly ripen, gather carefully and place in a warm place of even temperature. The quality improves and it is then desirable. For keeping longer, pack in shallow trays or wrap the fruit in paper and store in a room free from frost. It can be frequently kept until Christmas in this manner.

Lawrence (E). October 1. The latest of the European pears. The fruit is medium size and yellow in color, flesh white, melting and rich in quality. Trees are hardy and productive. One of the best of the winter pears.

Seckel (E). September 15. This small high-quality yellowish brown pear is one of the most popular of the September fruits. Of melting, juicy and sugary quality (frequently called the little sugar pear), makes it one of the most popular varieties. The tree is of slow growth.

New Castle, Ky.

I have ordered trees from you for 25 years and am of the opinion yours is the only nursery entirely dependable—a little strong but it's my opinion.

E. H. S.

Elberta.

The Peach

Light and well drained soils, preferably sandy loams seem to produce the best peaches. The tree is quick to mature, bearing heavily at an early age, and its comparative freedom from disease makes it deservedly popular. The annual pruning should consist of shortening in the terminal growth to maintain a round and compact head. When the crop is killed by severe winters as the one of 1918, "dehorning" or severe cutting in of branches is suggested. The tree bears its fruit on the young wood.

The principal enemy of the tree is the "Peach Borer" that burrows under the bark below the ground line. Turning back the soil, scraping with a knife or prodding the runs with a wire is the surest remedy. Boiling water poured about the trees will also kill the borer.

In Planting. Prune severely. Cut away all the side branches to inch stubs and shorten back the leaders to form a balanced, low and compact head.

Some varieties are limited

	Each	10	100
Extra Size, 5-6 feet	\$0.65	\$6.00	\$50.00
Medium Size, 4-5 feet	.55	5.00	40.00

Early Ripening

Mayflower (Free). Red all over, fine and good. The earliest peach known, June 25th. Extra hardy.

Red Bird (Cling). A creamy white peach almost covered with red. Large, hardy and good. An extra cling that gives promise of being a leading commercial variety. July 1-5.

Greensboro (Free). The very best extra early commercial sort. Hardy and productive, fruit large and tree healthy. Color, white with crimson cheek. July 1.

Second Ripening

Alton (Free). White, splashed and shaded with red. Skin tough, of good quality. Hardy. About the same season as Carman but larger. July 25-August 1.

Belle Georgia (Free). White with decided bluish, excellent quality, heavy and regular bearer. In Hiley and this variety we have the two best white fleshed peaches for home or market. August 5.

Brckett (Free). Orange yellow mottled and blushed carmine. Large, quality the best. We have not fruited this new variety but because of its popularity we have added it to our list. About a week later than Elberta. August 20-25.

Carman (Free). White with red blush. Carman is extra hardy, bears every year, and when it fails all else fails too. Tree a very robust grower and produces heavily. Next to Elberta, Carman should be considered. We are partial to it. July 20.

Early Elberta (Free). Well named, being a clear yellow with blush, finer grained and sweeter. Tree a strong grower, with a tendency to thin itself, carrying moderate loads of fruit. August 10.

Elberta (Free). Beautiful yellow, large and shaded with deep red. Elberta has been the peach for years, and is just as good today. The fact is that more than 80 per cent of commercial plantings are of this variety speaks well enough for it. August 15.

Hiley (Free). Cream white with decided red cheek, oblong, large, firm and of best quality. Good shipper and just a few days in advance of Georgia Belle. Hiley is a new variety and it belongs in every orchard or yard. August 1.

Illinois (Free). Large red and white peach with a brilliant crimson cheek. Showy. Flesh firm, juicy. Good for market or shipping. Free from rot. August 1-5.

J. H. Hale (Free). Yellow, almost covered with red; more highly colored than Elberta; flesh firm, melting and of best quality. Ripens August 10-15. This is the much heralded peach of J. H. Hale, the "peach king," that has been so widely advertised.

Late Ripening

Chair (Free). Originated in Maryland. Fruit of very large size; deep yellow with red cheek; flesh yellow, firm and of good quality. Tree strong grower and productive. One of the best of the Crawford family. Sept. 20.

Heath (Cling). White, tinged next to the sun. A large, firm, juicy peach of most pleasing flavor. Well known. October 1.

Henrietta (Cling). Yellow with crimson blush. A large, fine fruit. Tree healthy and productive. September 20.

Krummell (Free). Golden yellow blushed red and carmine. Large, round, melting, sub-acid, good. Another new peach that is fast gaining in popularity. September 20-25.

The Cherry

Cherries succeed only in the drier soils, preferring types that are porous or stony to the low and heavy kinds usually required by other fruit trees. They do especially well in our section and though a little hard to establish should be planted in every orchard. We find the sour and sub-acid group more productive of fruit. They do not make trees quite as large nor as shapely as the sweets but they are quick to bear and usually yield extra heavy crops of fruit. They are much more dependable and for this reason we recommend their use. The sweet or Hearts make vigorous trees valuable for planting in back yards for shade but are not constant producers.

Pruning of the bearing trees is seldom necessary save sawing broken or mutilated branches. Grouping the trees, especially the sweet varieties for pollination purposes is suggested as they are sometimes barren when planted by themselves.

At planting time shorten in the branches about halfway leaving 4 to 7 to a tree and be very sure to tread the soil firmly about the roots. We have more complaints of cherries failing than all the rest of the fruit varieties. Be sure to wrap stems and give them a little extra attention.

Extra Size, 5-6 feet

Medium Size, 4-5 feet

Each	10	100
\$1.00	\$10.00	\$90.00
.90	8.00	70.00

Early Richmond. This old standard cherry has been the favorite for a number of years. In quality it is tart and very valuable for canning purposes. It yields nearly every year and reddens the tree with its wonderful crop. It succeeds everywhere cherries will grow and as it is the earliest in season of bearing it is very popular.

Late Duke. This is a sub-acid variety of a large light red fruit, rich and tender in quality. The tree is decidedly upright in character of growth, resembling the sweet in this respect but decidedly hardier.

May Duke. This ripens a little earlier than the preceding variety and while not quite so vigorous in tree, the fruit is lightly superior. It is an old variety and has been tested and found worthy of a place in all catalogues.

Montmorency. This is gradually supplanting the Early Richmond principally because of its size. It resembles Richmond very closely and except for being a little later the descriptions are practically the same. This variety is not quite as acid as others of its group and when ripe is good to eat from hand. The tree is hardy, blooming late and will make a crop frequently when the sweet varieties fail.

Hearts and Biggareaus

Black Tartarian. This old fashioned variety is today perhaps the most popular of the sweet varieties. The fruit is large, black and heart-shaped. In quality it is rich. The tree is vigorous and where one has suitable soil this one should not be overlooked.

Governor Wood. This is another variety that has been catalogued for a number of years and to date we find few that are superior to it in quality or productiveness. It is a pale yellow with blush; fruit medium sized and flesh soft and of good quality making it a most valuable table cherry.

Montmorency.

Napoleon. This and Yellow Spanish are very similar. It, however, is a prince among its kind. The tree is more erect and productive of fruit. As a commercial sort it is planted in large acreage and for home use we consider it one of the very best of the sweet cherries.

Rockport. This is a grand mid-season cherry that is very high in quality and vigorous of tree. Would be more popular if it were better known.

Windsor. This is the modern Black Tartarian and holds second place to none when it comes to quality and productiveness. It is frequently sold as Ox-heart.

Yellow Spanish. This is a later variety than any of the preceding. Its large yellow, firm and high-qualified fruit has made it exceedingly popular around the whole world. It is not quite as tender as some of the preceding and its fruit can be adapted to a multitude of uses. Not planted as it should be.

Compass Cherry

A cross between a plum and cherry, the fruit resembling the former and the tree the latter. This hybrid is especially valuable for its hardiness and early bearing, often fruiting in the nursery row. About the size and shape of a Damson, but red. Quality fair to good. We have only a limited supply and offer at same price as plum trees as long as they last.

Extra size, 4-5 feet trees.

Height alone does not represent physical value—our trees are well branched and stock specimens.

The Plum

The plum demands a rich soil and additional fertility given after a few years proves beneficial. The trees usually are planted about 25 feet apart and can be used as a filler in an orchard between permanent trees. They thrive especially well in back yards, gardens and in chicken runs.

For home consumption the fruit should be allowed to ripen on the trees but for shipping they should be gathered a few days earlier. Some varieties always over-bear and thinning should be done to increase the size of the fruit. The two enemies are curculio and rot, both can be controlled by proper spraying and cultural methods.

As the trees bear soon and are productive, more should be used each year. There are three classes, the European (E) are better quality, the American (A) are superior for hardiness, and the Japanese (J) bear earlier than any.

Note spraying calendar on pages 46-47 how to control. The borer, similar to the one that attacks peaches, is also found. Scraping is the only practical way to eliminate.

Pruning at planting time should consist of removing one-half to two-thirds of the length of all the side branches, leaving 4 to 7 evenly distributed around the body of each tree.

Prices

	Each	10	100
Extra Size, 5-6 feet. . .	\$1.00	\$10.00	\$90.00
Medium Size, 4-5 feet. . .	.90	8.00	70.00

Abundance (J). July. One of the best and hardest of the Japanese varieties. Fruit is large, oval and in color amber changing to cherry. The quality is very good and the tree is hardy. One of the best.

Burbank (J). Late July. A later, more vigorous variety than the preceding. In color, violet to light purple with occasional shades of yellow. Fruit is large, flesh yellow and of excellent quality. For either canning or marketing this is the most popular sort. We believe it to be the hardest and most prolific of the Japanese varieties.

Damson (E). This variety has been a standard for years and really too well known to describe. Trees are upright in character of growth and usually bear great crops when given congenial soil. Succeeds everywhere plums will grow.

Endicott (Hybrid). This is a new hybrid that will no doubt prove a valuable addition to our list of varieties. The tree is one of the most vigorous. It seems to be absolutely free from disease and bears a great crop of fruit, amber in color and of excellent quality.

Green Gage (E). Another old variety that has been outstanding for a number of years. It ripens in mid-August and its medium-sized, yellow-green, high-qualified fruit make it a standard of excellence by which the others are judged. The tree is a moderate grower but healthy.

Burbank Plums.

Imperial Gage (E). Late August. Very closely resembling the preceding except being larger and a little later than its parent.

Lombard (E). August. We consider this the best of the dark colored plums for our section. The tree is vigorous and will produce a crop as often as any other. It is a valuable market variety as well as for home use. The fruit is medium sized, bright purple in color and in quality it is very good.

Omaha (Hybrid). This is another very promising variety being vigorous in growth and free from disease. It being an American-Japanese hybrid, inherits the hardiness and productiveness from each parent and produces great crops of coral fruit that is yellow fleshed and of good quality.

Red June (J). July. A typical Japanese in character of growth, productiveness and quality of fruit. Color red; flesh yellow; semi-cling stone and of good quality.

Yellow Egg. Early August. A large early plum of pure yellow color. Of extra quality and tree a great bearer.

Wild Goose (A). This variety has been a standard favorite for many years. In vigor and productiveness it has no equal in the plum family. Is practically free from disease and if given good soil will well repay for the space it occupies. It annually produces a great crop of large, red plums of fair to good quality. A most valuable variety for home or market.

The Quince

Luxuriates in good, deep ground, and on such will quickly yield an abundance of fruit just the best to preserve or for jelly. We have tried all the standard kinds, but the Orange has done by far the best for us.

	Each	10
4-5 feet	\$0.75	\$7.00

Persimmons

The persimmon is the last of the fruit to ripen, hanging on the tree until well into the winter. It requires care in planting and sharp pruning. It bears in a few years and is long lived. The native fruit often forms a pleasant link in the sweet chain of memories of the old home.

	Each	10
4-5 feet	\$0.75	\$6.00

Red Dutch Currants.

Color of fruit a brilliant red, large berries borne in long clusters along the stems and quality is excellent. The white varieties have proven worthless in this climate.

Currants

Thrive in deep soils, and when properly manured and cultivated will yield bountiful returns. The insect enemy causing the most injury to the currant and gooseberry alike is a leaf worm that can be killed by spraying the foliage with arsenate of lead or paris green as you do potatoes for the beetle. These return at intervals of a few years and not necessarily prevalent every season. The pruning of the older plants consists in leaving a fair amount of the three and four year wood, as it is more productive of fruit. In planting, allow about 4 feet each way for development and prune in most of the top immediately after setting.

2-year plants only.

Each	10	100
\$0.25	\$2.00	\$15.00

Add 20 cents per 10 for postage.

Red Dutch. By far the most productive of the many kinds we have tested.

Strawberries

We make the growing of strawberry plants a specialty and as they are planted in the spring only, we issue at that time an annual catalog, devoted principally to the description of varieties and complete cultural directions. The shallow root of the strawberry does not permit planting in the fall, as the alternate freezing and thawing or expansion and settling of the surface soils throughout our falls, winters and early springs will expose the roots and cause the loss of the plants. We expect to have our annual supply, something over a million plants of best adapted varieties, as our blocks at this time give much promise.

Downing Gooseberries.

Gooseberries

Very productive and are always in demand. When allowed to ripen they lose much of the sourness attributed to them because they are usually offered to the public while green. Note pruning and cultural directions for currants. Plant 4x4 feet, getting the earth well worked into the roots and firm. Prune off the tops to a few inches in order to assure growth.

Each	10	100
\$0.25	\$2.00	\$15.00

Add 20 cents per 10 for postage.

Downing. Fruit almost round, large, and juicy. Best quality. Whitish green color. Does especially well in the North.

Houghton. Round, dark red when ripe; juicy, sweet. Thin, smooth skin. Medium size. The bush is hardy, very productive, free from mildew, and the best for general purpose in this section.

Strawberry Planting.

Trees arrived in fine shape, they were elegantly fine. You surely are in a class of your own in taking care of your customers. W. P. G., Frankfort, Ky.

Concord
Grapes.

Black Grapes

Concord. This is without doubt the best general purpose grape grown. Its planting perhaps equals that of all the other varieties combined. Berry large. Bunches shouldered and fairly compact.

Cottage. A seedling of the above. Ten days earlier; not quite as good quality, but desirable for its season.

Ives. For hardiness and productiveness this grape has no equal. Quality not equal to Concord, but ripens earlier and will hang on the vine until shriveled. To mix with Concord for wine or grape juice it is unsurpassed.

Worden. A seedling of Concord, of better quality. Ripens ten days earlier. Bunch and berry large, compact. Not quite so hardy or long-lived; however, it should be planted in every collection.

White Grapes

Martha. An old standard white grape of merit.

Niagara. The best white grape; bunch and berry large, meaty and juicy; flavor perfect. Well known.

Diamond (Moore's). A standard white variety in some sections. Berries and bunches medium sized.

The Grape

This ancient fruit is at home on any character of soil and there is not a place that should be without it. Whether in the vineyards or arbors, backyards, or trained on fences, porches or buildings, the grape bears with astonishing regularity. The secret of successful growing lies in proper pruning. The annual growth should be cut back to 3 to 4 buds each season, removing entirely the weak canes. As the vines produce better on the younger wood, consistent renewing from the bottom by encouraging new shoots every few years is recommended.

At planting time shorten the roots to 14-16 inches, and the tops to two or three joints and lay in trenches eight inches deep, with only the buds showing. By placing the roots all in one direction, stakes or posts may be renewed at any time without damage to the roots. Prune back the first season's growth, and second summer train but two vigorous canes to stakes. At the end of the growing season shorten these to 4-6 feet depending on the vigor of the plant, training off laterals to cover your wires or buildings from these. Some varieties very scarce.

	Each	10	100
2 Year, No. 1 Vines	\$0.30	\$2.50	\$20.00

By parcel post add 25 cents for 10 vines.

Red Grapes

Brighton. Large, compact, shouldered bunch, with medium to large berry; juicy, sweet, good. Unsurpassed for table.

Catawba. The standard late red grape that has lost none of its popularity. Its season and quality make it indispensable.

Delaware. A well known red grape. Bunch and berry small, compact. Flavor unsurpassed. Not a strong grower; must be given good, rich soil.

Lindley. Of exceptionally good quality, large; ripening in mid-season. Vigorous of vine and hardy.

Lucille. A new grape of decided merit. Very hardy, likely to overbear if not pruned severely. Bunches very compact, color light red.

Lutie. An early grape of good size. Its popularity makes the vine scarce.

Wyoming. Bunch and berry small but perfect. A hardy, productive variety of excellent quality. We grow more of this than any other red grape.

Woodruff Red. This is an excellent amber colored variety for jelly. Berries extra large, crowding each other on the large bunches.

Niagara Grapes.

Raspberries

Loose soils produce the best raspberries. Partial shade is no hindrance to productiveness, as the natural habitat of the raspberries is in lower ground, filled with leaf mold and partly shaded. For this reason along higher fences and in between the young orchard trees, raspberries are likely to thrive. Allow not more than five good canes to develop to the plant, and pinch out the tops of these when they attain a height of 2½-3 feet in order to encourage laterals.

Both pink and black raspberries are sold only in bunches of 25 plants. Less than this number is hardly worth the trial.

Red Raspberries

Per 25	100	1,000
\$0.75	\$2.50	\$22.50

By parcel post, 15c per 50 additional.

Cuthbert. Crimson, large, conical, firm and juicy. The canes are upright, strong and vigorous. Hardy. The standard late red market and home variety that is popular and unsurpassed.

Miller Red. Bright scarlet, sweet and melting. This early red is the best of its season because of hardiness, productiveness and general good qualities. Ripens two weeks before Cuthbert.

St. Regis. The so-called everbearing. It does produce some berries throughout the summer, and in the spring is an excellent producer. Quality very good.

Cuthbert Raspberries.

Blackberries

In a state where wild blackberries are so plentiful one without experience would hesitate to plant blackberries. However, the cultivated varieties are so prolific, so easy of culture, that every garden should contain this fruit. The soil to be ideal should be a heavy type—clay loam. This so-called "poor man's fruit" if planted 7x3 feet will each year, more than pay for the space it occupies. Many plant too close for best results. Topping in the young shoots just as they reach 3½-4½ feet to develop the side branches to fruiting condition is the only pruning required, save the removing of the old canes after they have produced a crop.

Per 25	100	1,000
\$1.00	\$3.00	\$25.00

By parcel post, 15c per 50 additional.

Early Harvest. Extra earliness and productiveness make this the leading commercial and home variety. Is through with its crop when the wild ones begin to ripen. Hangs well onto the canes and is a money-maker.

Eldorado. A large, oblong, conical berry, with small seed and core; sweet and juicy; hardy and productive.

Cumberland Raspberries.

Blackcap Raspberries

By parcel post, add 15c per 50.

Per 25	100	1,000
\$1.00	\$3.00	\$25.00

Cumberland. Large, glossy, black, rather oval. Firm and stands handling well. After fruiting eight or ten new kinds we have come to the conclusion that no black raspberry of its season compares with it.

Kansas. The great market variety, more generally planted than any other kind; early, large, productive, round, firm, moderately juicy, a strong grower. Handsome appearance; stands shipping well.

Eldorado Blackberries.

Asparagus

Asparagus is the earliest and best of all esculents and the easiest to grow if many old ideas are discarded. It is one of the most persistent of plants—tough as dock, but even dock can be killed over the same lines that cause people to fail with asparagus. There are two ways to grow asparagus. The owner of a town lot needs a bed five feet wide and as long as he wishes. Let it be made cream rich, spaded over, and three rows eighteen inches apart be drawn through it with a six-inch hoe, and say, four inches deep. Then the crowns should be spread out in these just as near like a spider as possible. Then let the earth be raked over and let this bed be kept clean and free from weeds for all time and well manured.

The gardener, with a plow and ample ground, can do better. Let him lay off rows five or six feet wide, and plant and manage just as indicated. After two years growth, the town man must fork over his bed, but the farmer can just cut the earth from the rows and turn it back. The old idea was to set the roots a foot deep, so that the shoots might be long and white. The new idea is to let the plant grow like any other and then mound over the crown when the shoots are wanted otherwise than nature intended, and at the end of that time to plow the soil and restore normal conditions. This can be done by the large grower, but the town man can only heap more manure and force the plant to make a new tier of roots nearer the surface. Asparagus wants to be near the surface like any other plant, and if we will heap the earth over them for a long time and then remove it when shoots long, white and tender are no longer needed, grandchildren will bless the hand that planted. The things that cause failure are planting near trees or vines, the covering of plants so deep that resurrection is impossible, the mowing of tops when green, the covering with salt and rioting of weeds. Moles do not injure; no pit is needed nor wall of stone, but only the practice suggested. There are thousands of beds ruined by some of these malpractices, for which nothing can be done except to plant a new bed and treat the old in the meantime with ordinary plant prudence. The plants may be set with equal certainty either fall or spring.

The rust, so destructive for some years on asparagus generally, has disappeared, and the plants are now perfectly healthy. We have never grown so large and fine a stock and can furnish all orders—great or small.

2-year plants, per 50, \$1.00; per 100, \$2.00.

Parcel post, 40c per 100; 25c per 50 additional.

Rhubarb

Rhubarb or pie plant is known to everyone. Planted 4x3 with eye 4 inches below the surface on cream soil, success is assured. We offer only divided crown and not seedling plants as these are worthless.

Each	10	100
\$0.10	\$1.00	\$8.00

By parcel post, 10c per 10 additional.

Excelsior. Very early with long stem. Plant vigorous and dependable.

Victor. Later than above, heavier of stalk and of good quality.

Asparagus.

Sage

Each, 10c; per 10, 50c.

By parcel post, add 10c per 10.

A well known plant for the garden, of easy culture and long lived. The leaves are indispensable for certain seasonings.

Horseradish

Per 10, 25c; per 100, \$2.00.

By parcel post, add 10c per 10.

The roots serve as an excellent relish. Once established is of very easy culture.

Seed Potatoes

Second Crop Seed Potatoes, or those planted in July and matured in late fall assure seed of the best quality. We have been growers for years and we know that our seed potatoes matured weeks after the "Northern Seed," owing to the nature of the potato, will give much better returns. We have selected for several years only smooth potatoes, true to type, and therefore offer seed of insured quality. Description and prices will be included in our spring catalog.

This last lot of evergreens was an unusually nice lot. The spruce for the vases was ideal in form and size and I never received any lot of evergreens that added so greatly to my planting and the general appearance is wonderfully improved.

C. F. S.
Frankfort, Ky.

Showing Marginal Planting and that Desirable Open Lawn.

Ornamental Department

A Tree Leaves the Nursery at Its Lowest and for the Planter Reaches Its Greatest Valuation.

It has been said that some philosophers interpret all human action as a result of a desire to realize personal happiness. And after all, around the home centers most of our personal happiness. A home owner who maintains a well-kept lawn, judiciously planted with trees, shrubs and flowers, with some added features, is certainly making a contribution to the beauty of his community and to the happiness and value of his home.

The whole country is just awakening to this fact and there are a number of apparent reasons why extensive planting of the home grounds should be carried out. They really should be made as attractive as the home itself, for do we not add to the interior, decorations, pictures, draperies, furnishings and features designed with the idea of comfort, beauty and convenience and if we have untouched and unplanted the grounds about the home, we have failed to realize an opportunity of making that home everything the word implies.

Ornamental plants carefully selected and properly arranged not only enhance the value of a property but also in their gracious and manifold uses add a beauty and intrinsic value each succeeding year. Unlike manufactured articles that are invariably valued highest when they are first sold, a tree leaves the nursery at its lowest valuation and each succeeding year when properly used, increases in worth.

With ornamental plants, trees and shrubs one has numerous opportunities of beautifying his property. Whether to cover or fill a depression, to bring out architectural features, to accentuate a beautiful vista or to screen an unsightly object, to furnish food, shade or shelter to man, beast and bird, to be used to contrast or soften, in fact everywhere we find uses for such plants. In the spring a beautiful blossom, in the summer luxurious foliage, in the fall a riot of color and in the winter their beauty of bark and berry are impressed on every lover of nature.

Landscaping

In order to guide those who appreciate the value and benefit of ornamental planting and wish the pleasure of doing it themselves the following suggestions may not be amiss.

General Plan

Start out with a definite object in view, making a mental picture of just what effect you want and then carefully plan your requirements, keeping in mind the ultimate development of the varieties used. Haphazard planting, random arrangements and unsuited varieties invariably make an unsatisfactory impression and often detract rather than embellish the grounds on which such work is done. Some general rules follow:

Locate your walks and roadways, arranging

them for service and beauty, avoiding straight lines and sharp angles as far as possible, as graceful curves are more pleasing to the eye. Avoid terraces and steep grades but rather plan longer natural slopes, as maintenance is easier and the effect is better. Plan to give the home an inviting approach. It is here that arrangement rather than promiscuous planting counts the most. Since the attractiveness of the home depends on the lawn feature, arrange to leave the lawn open, plant along the drives and borders using taller trees in the rear to give background and character and also to the sides of house to shade, frame and accentuate the view. It was Ruskin who said "The exterior of your house is not private property".

Specimen trees should be used for this character planting and along the borders masses of shrubs arranged so the taller ones of bolder outline will be in the rear, while lower growing and choice varieties will add grace and beauty to the front of the group. Remember do not plant varieties that will shut off vistas or hide objects of merit nor plant low growing plants where an objectionable sight should be screened. Frequently unexposed or private areas are desirable, and this can be accomplished with taller or "King Plants" around which should be massed suitable low growing shrubs. Also do not use too many varieties in border planting for the general effect is much better where at least five plants of a single variety are used.

Foundation Planting

Next of consideration is the foundation planting. This unconsciously binds the house to the grounds and softens the abrupt transition so noticeable on homes not so treated. This has of late become the most popular form of exterior home adornment.

WHAT TO USE. Planters' tastes and ideas are as variable as the plants themselves. Some prefer deciduous shrubs, others evergreens and some a combination—a happy effect may be had from all, but plan and plant carefully and give them attention. We approximate the height to which all plants grow and those especially suited for foundation use are marked with (F) which of course does not mean that their exclusive uses are confined to foundation planting. Plan your beds as follows: Plant the taller growing varieties between windows, in front of pillars and in the corners or background, so as not to obstruct the natural outlook but rather to soften the bare walls, to break the stiffness of symmetrical pillars and fill the nooks with a massed growth so as to

mellow hard lines. Under the windows and between the pillars of the veranda use medium height plants. This combination gives an excellent effect and a substantial background for lower growing plants which should be used for edging or bordering. Arrange these to alternate with the back row and plant so as to avoid perfectly straight lines for this is what you are planning to eliminate. Where sufficient space exists, and ten feet is ample, some curvature in the border is more pleasing than a straight line. Rounding corners and filling angles often requires as many as three rows of plants and in each instance maintain graceful lines as it means much in the general appearance of the bed. Note arrangement on pages 27 and 43.

SPACING. This general rule may be applied: Height and spread of deciduous shrubs almost approximate each other, therefore, for mass effect on plants six feet high, plant 4 to 4½ feet apart, those 4 to 5 feet high, plant 3 to 3½ feet apart, etc. This is a general deduction, exceptions very few.

In planting where service and private areas are wanted, these too can be made attractive, whether they are laundry yards, garage courts, service entrances or kitchen gardens. Perennial borders, pergolas, rose arbors, cozy seats, bird baths, fountains, etc., can all be included harmoniously as integral parts of the home grounds. Good grouping of trees and shrubs will hide the bad features and bring out the good ones.

As we devote considerable acreage to ornamental trees and plants and that stock is of such high quality we solicit your patronage, fully confident of the good results our stock will bring. We are at your service—and will gladly advise you what to plant if you need assistance.

No. 1—Mugho Pine. No. 2—Norway Spruce. No. 3—Arbor-vitae. No. 4—Retinispora. No. 5—Bechtel's Flowering Crab. No. 6—Spirea Van Houttei. No. 7—Dorothy Perkins Rose.

A very attractive roadway—Norway Maples and Privet Hedge used.

Deciduous Trees

Here we have those monarchs of the forest, those real royalties of the woodlands and how truly wonderful they are with their graceful spreading branches or their upright heads piercing the sky. Trees bring a natural beauty to the lawn, pasture lot, street, avenue or park. For shelter or shade, for fruit and blossoms, for general planting purposes they are indispensable. All trees are valuable additions to a place and often a tree will bring back many memories of by-gone days, or an avenue or street will often prove to be a most valuable asset to any city planting.

WHAT TO PLANT. Knowing them as we do we might say that every tree has its faults and careful selection should be made. Some trees are of rapid and some of slower growth. We have them with wondrous colored foliage, beautiful flowers and autumnal leaves. Plant for permanency the hardwood types. They grow a little slower but are worth the time they take. Where quick effect is wanted alternate with the rapid growing kind which can be removed later when necessary. Many varieties are native and will thrive well on your soil. Plant liberally of these good varieties and leave a legacy of trees such as we ourselves have enjoyed. We call your attention to the planting suggestions offered on page 3 and also the calendar opposite mentioning trees best suited for special purposes. Plant large growing trees 40 feet apart and those not so robust at 30 feet. Where the alternate system is used, 20 feet apart is sufficient. Be very sure and prune all shade trees at time of planting and also wrap the stems especially on sidewalks or exposed places. This prevents sun scald which often weakens the vitality of the tree. Mulching too should not be overlooked.

AVENUE TREES

Ash	Norway Maple
Elm	Sugar Maple
Gum	Sycamore
European Linden	Pin Oak
Silver Maple	Lombardy Poplar

TREES THAT COLOR IN THE FALL

Ash	Oak
Dogwood	Tulip Poplar
Sweet Gum	Varnish, Japan
Maples	Sumac

TREES FOR QUICK EFFECT

Ash	Lombardy Poplar
Catalpa	Sycamore
Silver Maple	Weeping Willow
Russian Mulberry	

TREES THAT FLOWER

Catalpa	Magnolia
Dogwood, White	Tulip Poplar
Dogwood, Red	Red Bud
Horse Chestnut	Crab Apple
Linden	

ODD AND CONSPICUOUS

Purple Beech	Magnolia
Weeping Birch	Weeping Mulberry
Catalpa Bungei	Japan Varnish
Cypress	Schwedleri Maple
Kentucky Coffee	Red Bud
Larch	Weeping Willow
Maiden Hair	

FOR LOW OR MOIST SOILS

Ash	Poplar
Maple	Willow
Birch	Elm
Larch	Cypress
Oak	Sycamore

Tulip Poplars—This Variety is Usually More Pyramidal than the Picture Indicates.

Ash - Fraxinus

Native trees of quick growth, thriving on dry or moist soils. Branches spreading, foliage healthy, growth rapid and easy to transplant should make them even more popular.

American Ash (*F. Americana*). A stately native tree, with straight clean growth, foliage light green. Dependable and very satisfactory as it grows rapidly, being a forest tree valuable for timber.

Green Ash (*F. viridis*). The foliage in the fall is light green, changing to a rose tint before the leaves fall. The leaves are roundish and rather large for the species. Very quick to take hold when transplanted. One of our best shade trees.

European Ash (*F. Excelsior*). This tree is not often planted as persons are not familiar with its good qualities. It is very rapid, spreading in habit of growth. Leaves very dark green, narrow and pointed, nevertheless good for shade. Bark is gray and the buds on the young wood are black. Recommended for specimen, group or natural planting.

	Each	10
6-8 feet	\$1.00	\$ 9.00
8-10 feet	1.25	10.00
10-12 feet	1.75	15.00
12-14 feet	2.25	20.00

Beech - Fagus

The beeches are most attractive. When properly grown, with their low spreading branches and general symmetry of growth they are one of the most popular trees for lawn use. The leaves remain late in the year and for that reason for screening purposes are frequently planted. While not very rapid in growth, the effect produced is worthy of the wait.

European Beech (*F. Sylvatica*). The foliage is a silvery green, the young growth and under side of the leaves being especially noticeable. Holds the foliage well and colors vividly in the fall.

	Each	10
7-9 feet	\$1.50	\$12.50
6-8 feet	1.25	10.00
5-6 feet	1.00	9.00

Purple or Copper Beech (*F. Purpurea*). Thus called because of its especially dark purple foliage. In the spring, when first in leaf the richness of its color must be seen to be appreciated. In mid-summer it holds its color well but changes to a crimson in the fall. For brightening dull shades in shrub borders, planted as specimens on the lawn or in the foreground of light colored buildings for contrast, it can be highly recommended.

	Each	10
7-9 feet	\$2.00	\$17.50
6-8 feet	1.75	15.00
5-6 feet	1.50	12.50

Birch - Betula

Conspicuous trees with their white bark, clean growth, small and pendent young wood. Native to moist places but nevertheless when transplanted on dry ground seem to thrive equally as well. Planted as specimen trees, in borders for screen effect or grouped against buildings or better contrast with evergreens, the winter effect is wonderful.

White Birch (*B. alba*). Tree of quick vigorous growth, bark is almost white, erect growing with terminal branches slightly drooping. A very satisfactory tree that should be more widely used.

	Each	10
8-10 feet	\$1.75	\$15.00
7-9 feet	1.50	12.50
6-8 feet	1.25	10.00

Weeping White Birch (*B. alba pendula*). This tree is one of the most conspicuous trees grown. With its white bark, deeply cut leaves and long pendent branches it presents a picturesque effect planted either as a specimen or otherwise. It should be pruned severely when planted and once established will prove of great merit.

	Each	10
7-9 feet	\$2.00	\$17.50
6-8 feet	1.50	12.50

Purple Birch (*B. purpurea*). Tree is a typical birch, bark a dark hue and the leaves purple in color. Branches follow the general birch habit—drooping gracefully.

	Each	10
6-8 feet	\$1.50	\$12.50

Catalpa

Umbrella Catalpa (C. Bungei). This tree has become popular because of its straight stems and symmetrical roundish heads which resemble an umbrella. The tops are dwarf and while they do not grow very rapidly their wide leaves give them the appearance of much larger trees. The foliage is very pleasing and the effect obtained when planted in pairs along walks, drives or entrances is greatly admired. Each 10

2-year heads, 5-6 feet\$2.00 \$17.50

Western Catalpa (C. Speciosa). This is a tree of very quick growth, and thousands of seedling trees have been planted for timber. The growth is astonishing when planted on moist land, but thrives on higher and poorer soil. The tree in June is a mass of white bloom and therefore highly desirable when flower effect is desired. Each 10

8-10 feet\$1.00 \$9.00
7- 9 feet75 6.00

Cypress - Taxodium

Bald Cypress (T. distichum). This is very conspicuous with its pyramidal growth, unusual bark, fine, feathery, light green foliage—a cone bearing tree but unusual because it is deciduous. Native to moist soils but some of the best specimens seen are on soils entirely free of drainage water. Each 10

7-9 feet\$1.50 \$12.50
6-8 feet 1.25 10.00
5-6 feet 1.00 9.00

Dogwood - Cornus

White Flowering Dogwood (C. Florida). A native tree known to everyone. Of irregular shape but very desirable for flower effect in the early spring before its leaves appear. In the fall colors wonderfully before shedding. Planted in groups, as a background for a shrub border or planted in contrast with the flowering Red Bud proves a small tree worthy of extensive planting. Each 10

5-6 feet\$1.00 \$9.00
4-5 feet75 6.00
3-4 feet60 5.00
2-3 feet50 4.00

Red or Pink Flowering Dogwood (C. Florida rubra). This is a colored form of the above native sort, resembling it very closely in habit of growth, period of bloom and general behavior. Conspicuous in the early spring with bright deep rose blossoms. Each 10

3-4 feet\$2.00 \$17.50

Elm - Ulmus

American Elm (U. Americana). A tree of unusual vigor, a native too well known to describe. It is rapid of growth, with its long spreading and pendent branches forming giant arches over roads and streets or as a lawn tree is quick to make a marked effect. The wood is tough, the leaves are moderate in size and makes a permanent tree for shade. The beetle that defoliates the European elms usually avoids these.

Slippery or Red Elm (U. fulva). A tree of very rapid growth, more so than above named variety. The branches are long and clean of bark, the leaves larger. The bark is used for medicinal purposes and perhaps this makes the tree especially well known.

Large specimens specially priced in Elms.

Each 10
12-14 feet\$3.00 \$25.00
10-12 feet 2.00 17.50
8-10 feet 1.50 12.50
7- 9 feet 1.25 10.00

American Ash.

Cork Barked Elm. We have some young trees of this variety. The bark is very unusual, being in pronounced ridges all along the trunk and branches are similarly ringed. In growth and foliage otherwise as other Elms.

Each 10
7-9 feet\$1.25 \$10.00
6-8 feet 1.00 9.00

Gum - Liquidambar

Sweet Gum (L. styraciflua). Another native tree not appreciated. It is not of rapid growth nor especially easy to transplant, but the glossy foliage in summer, the brilliant color in the fall and the unusual appearance in the winter of the young branches with their corky bark are considerations that make it especially valuable.

Each 10
10-12 feet\$3.00 \$25.00
8-10 feet 1.75 15.00
7- 9 feet 1.50 12.50
6- 8 feet 1.25 10.00

Horse Chestnut - Aesculus

European Horse Chestnut (A. hippocastanum). A tree of slow growth, yet very attractive in its roundish form with large leaves that are conspicuous in early summer. There is a leaf rust that affects the foliage late in the summer that detracts somewhat from the good qualities of the tree. It is specially valued for the long panicles of flowers, white and tinged with red.

Each 10
7-9 feet\$1.50 \$12.50
6-8 feet 1.25 10.00

IF LARGER TREES ARE WANTED, WRITE FOR PRICES.

Sycamore.

Hackberry - Celtis

Hackberry or Nettle Tree (*C. occidentalis*). A tree resembling the Elm somewhat but of more erect growth. Used sometimes as a street tree. Fruit attractive to birds and small boys in fall.

	Each	10
7-9 feet	\$1.50	\$12.50
6-8 feet	1.25	

Varnish Tree - Koelreuteria

Japanese Varnish Tree (*K. Paniculata*). A tree unusual in form and character, being irregular in wood growth, but forming a roundish head of bright green foliage. The terminals of the branches are surmounted in July with showy yellow flowers in large panicles. The foliage in fall changes to a bright but pleasing yellow.

	Each	10
5-6 feet	\$1.00	\$9.00
4-5 feet	.75	6.00

Linden, Basswood - Tilia

European Linden (*Tilia Europea*). A very compact, pyramidal tree, of dark green foliage, easy to transplant and very satisfactory for avenue or lawn planting. Leaves are large, heart-shaped, the branches are smooth and tough and when the tree blooms, which it does profusely, the fragrance is noticeable for considerable distance.

Broad Leaved European Linden (*Tilia platyphyllos*). About the same as above save the tree is inclined to be taller, the leaves larger and of a lighter green.

	Each	10
8-10 feet	\$1.50	\$12.00
7-9 feet	1.25	10.00
6-8 feet	1.00	9.00

American Linden (*T. Americana*). Leaves are distinctly larger than other varieties. The tree is vigorous, and on fertile soil grows as rapidly as any tree.

	Each	10
7-9 feet	\$1.25	\$10.00
6-8 feet	1.00	9.00

Kentucky Coffee - Gymnocladus

Kentucky Coffee (*G. canadensis*). Native to Kentucky. Very blunt, sturdy branches, inconspicuous buds developing into frond-shaped leaves, giving the tree a more tropical appearance than any other native. Flowers inconspicuous but superbly fragrant.

	Each	10
7-9 feet	\$1.25	\$10.00
5-6 feet	1.00	9.00

A Typical Linden.

Showing effective use of Lombardy Poplars to screen our garage. It is also recommended for planting as a background, fire protection, avenue or division line where rapidity is desired.

Larch - Larix

European Larch (L. Europa). Like the cypress it is a deciduous tree bearing cones like evergreens. The foliage is very fine, needle-like, appearing earlier in the spring than any other tree and stays until very late fall. The tree is a perfect pyramid in shape, holds its contour until maturity. Very conspicuous because of bright green color, unusual needles, and branching habit. We recommend it for city planting also, as the foliage does not seem to be affected by smoke or dust.

	Each	10
8-10 feet	\$1.50	\$12.50
7- 9 feet	1.25	10.00
6- 8 feet	1.00	9.00

Extra large trees can be supplied.

Liriodendron - Tulip Tree

Tulip Tree or Tulip Poplar (L. Tulipifera). So called because of the resemblance of the blossoms to the tulip. It is a native of forest growth, known as Yellow Poplar and valued therefore for its wood. It is botanically classified as a magnolia and in May when its large leathery leaves have formed, it comes in full blossom, of creamy yellow, making a beautiful sight. Should be transplanted in small sizes, as it does not move as kindly as some trees. Its cleanly habit, quick growth after established a year or so and when given deep or moist soil thrives with unusual vigor.

	Each	10
8-10 feet	\$1.50	\$12.50
7- 9 feet	1.25	10.00
6- 8 feet	1.00	9.00

Magnolia

Cucumber Tree (M. acuminata). A native well known in our mountains, growing conical in

shape, having large, glaucous green leaves, making it very attractive. The flowers are fragrant, usually of dull white color followed by elongated green seed clusters which later turn coral in color. Very satisfactory.

	Each	10
7-9 feet	\$2.00	\$17.50
6-8 feet	1.50	12.50
4-5 feet	1.25	10.00

M. grandiflora. This is a purely Southern Magnolia and while the tree there usually reaches a medium height it does not do well on limestone soil. They seem to thrive best in moist porous soils, demanding an abundance of fertility. Where it does succeed planters are well repaid, the flowers being especially large and attractive, very fragrant, followed by scarlet seed. We purchase these from Southern nurserymen handling only smaller sized trees as they are difficult to establish.

	Each	10
4 feet	\$2.00	

Maiden Hair - Ginkgo or Salisburia

Maiden Hair Tree (Ginkgo biloba). A conifer but deciduous. It is allied to the pine family. On close examination of the leaves one will note the aborted pine needles bound together into a solid leaf. It is of Asiatic origin and carries with it the indescribable oriental appearance in the shape and position of its branches, leaves, character of growth and color of bark. Perfectly hardy here and in the East largely used for avenue trees.

	Each	10
10-12 feet	\$2.00	\$17.50
8-10 feet	1.50	12.50
7- 9 feet	1.25	10.00
6- 8 feet	1.00	9.00

Rock Maple—*Acer saccharum*.

The Maples - *Acer*

As a group they contain the most popular trees that are being planted today, and justly so. For quick effect, shade, brilliancy of color, adaptability to all conditions there is nothing to compare with the maple family. We have several varieties in various sizes, all very good when used in their proper places.

Silver or Water Maple (*A. dasycarpum*). Because of its quick growth, good foliage and ease to transplant this tree is in great demand. The tree blooms very early in the spring, leaves appear promptly, being light green in color but silvery beneath, and these remain until late fall. For planting as temporary trees—that is, alternating between the hard wooded and slower growers, as Oaks, Elms, Sugar Maples, Gum, etc., this variety is highly recommended. We grow large blocks of these and can fill your order with large or small trees in quantities.

	Each	10
12-14 feet	\$2.50	\$22.50
10-12 feet	1.75	15.00
8-10 feet	1.25	10.00
6- 8 feet	.75	7.00

Sugar Maple (*A. saccharinum*). Known everywhere and is so popular that it is difficult to keep a well grown supply on hand. Tree grows to be of great size, foliage of good color and in the fall turns indescribably to all tints imaginably. Being of erect, conical growth, perfectly hardy and wood of such texture that it will survive any abnormal condition of the weather and its adaptability to all types of soils makes it a variety justly popular. Native grown it proves valuable for the timber for hard wood finishing and also "tapped" for maple sugar. Each 10

12-14 feet	\$2.50	\$20.00
10-12 feet	2.00	17.50
8-10 feet	1.50	12.50
6- 8 feet	1.00	9.00

Extra large trees can be supplied.

Sycamore Maple (*A. Pseudoplatanus*). A tree resembling in growth the Norway Maple, having deep green and decidedly ribbed leaves, round and spreading in habit and a rapid grower. Each 10

8-10 feet	\$1.50	\$12.50
7- 9 feet	1.25	10.00

Norway Maple (*A. platanoides*). A tree resembling the preceding in character, but of darker and larger foliage, round and spreading in habit of growth. It is really the European hard maple and retains this character here. For lawn, as specimens or shade, to plant on streets beneath wires or for spreading over sidewalks, parks, cemeteries or for avenue or arching for roadways this tree is highly recommended. Sometimes the trunks are inclined to be slightly crooked when young, but it is well known that they grow out of this unsightliness in a few years when planted in the open. We offer these in large quantities from new blocks, assuring their quality and vigor. Each 10

12-14 feet	\$3.00	\$25.00
10-12 feet	2.50	20.00
8-10 feet	1.75	15.00
7- 9 feet	1.50	12.00

Extra large trees can be supplied.

Red Maple (*A. rubrum*). If it were not for the crooked trunks of this tree, as a lawn specimen it would prove most attractive. The young shoots are bright red in winter, blooming in early spring, a very brilliant color, with pleasing foliage until frost. Then it vies with the Oaks, Sassafras, Gum, Sumac or Sugar Maples for magnificence in color. Each 10

8-10 feet	\$1.50	\$12.50
6- 8 feet	1.00	9.00

Purple Leaved or Schwedler's Maple (*A. Schwedleri*). A tree resembling the Norway Maple in every respect except in early spring the foliage is a bright purple, changing from bronze to dull green. In the fall it turns bronze before defoliating. Each 10

8-10 feet	\$2.00	\$17.50
7- 9 feet	1.50	12.50
6- 7 feet	1.25	10.00

Silver Maple—*Acer dasycarpum*.

Mulberry - Morus

Russian Mulberry (*M. tartarica*). This makes a round headed tree, quick of growth and very profuse foliage. It is wonderfully productive of fruit and for anyone wishing to attract birds this tree cannot be surpassed. If planted in chicken runs it will produce fruit for several months. The fruit is considerably smaller than our native variety but the tree bears so profusely that it is visible for a considerable distance. Each 10
6-8 feet\$1.00 \$9.00

Weeping Mulberry (*M. tartarica pendula*). A very old tree, immediately attractive with its long sweeping branches that touch the ground. It is grafted on its parent stock—Russian Mulberry and is entirely free of all disease and bears shortly. Each 10
One year heads\$2.50 \$20.00

Oak - Quercus

The derivation of the word literally means—fine trees. As a group there is nothing superior to the Oak. The tree while a little slow of growth, on well fertilized or naturally good soil is very quick to respond and the little extra effort that must be exercised to establish them is repaid. The shapeliness, the vigorous foliage, the hardiness and durability, toughness and color effect in autumn, make this a most interesting group.

Pin Oak (*Q. palustris*). Of all the oaks this is preferred. Perfectly symmetrical from the base branches up, foliage a shining green, leaves deeply cut and in fall of wondrous colors—a combination for beauty, symmetry and durability not found in any other tree. It is the easiest of the oaks to transplant, more rapid of growth and in any capacity a tree may be used, whether shade, specimen, avenue, cemetery or park tree, if one is a little patient the reward is commensurate. So popular that we have nothing but the sizes as we list below to offer. Our block of several thousand trees has never been dug from before and our patrons will get only the most vigorous trees that will quickly establish themselves and grow off kindly.

	Each	10
10-12 feet	\$2.50	\$22.50
8-10 feet	2.25	20.00
7- 9 feet	1.75	15.00
6- 8 feet	1.50	12.50

Burr Oak (*Q. Macrocarpa*). A native variety, of slower growth but in years a stately tree well covered with thick, dark green foliage of heavy texture. For permanency it has no superior. Prefers a moist or deep soil.

	Each	10
8-10 feet	\$1.75	\$15.00
6- 8 feet	1.50	9.00

Red Oak (*Q. rubra*). Not as compact as Pin Oak, equally as rapid and a little more difficult to transplant, Red Oak is nevertheless very satisfactory. Leaves color purplish red in autumn and the tree will grow on any type of soil. Supply limited. Each 10
8-10 feet\$1.50 \$12.50
7- 9 feet1.00 9.00

Scarlet Oak (*Q. coccinea*). So called because of its autumn coloring. Resembles Burr Oak in habits of growth. Each 10
12-14 feet\$3.00 \$25.00
10-12 feet2.00 17.50
8-10 feet1.50 12.50

Pecans

Hard to establish and slow of growth. Not profitable on limestone soil.

Seedling trees	\$0.75
Budded trees	1.75

Poplar - Populus

Lombardy Poplar (*P. fastigiata*). A tall slender tree reaching great heights, very easy to transplant and of most rapid growth. Specimens often reach fifty feet with a spread of less than ten feet, and for this reason when tree plantings are needed for narrow places, between buildings, congested lawns, narrow avenues, this may be used with great satisfaction. Because of its great height and quick growth it is commendable for backgrounds of buildings, to add character to planting or to offset straight or bare lines. Further for screening unsightly views, fire protection from close buildings or wind breaks—and all for quick effect we unhesitatingly recommend this variety. A false impression prevails that it sheds its leaves early, but we assure of their misapprehension, as the tree is healthy in growth and foliage (see cut page 21). Not the same as Carolina Poplar description which follows.

	Each	10
10-12 feet	\$1.50	\$12.50
8-10 feet	1.25	10.00
7- 9 feet	1.00	9.00

Carolina Poplar (*P. monilifera*). Once very popular for rapid growth and effect but so easily broken by wind and sleet, so prone to leaf rust, causing litter from June to frost that the public is warned against its planting.

Tulip Poplar (*Liriodendron tulipifera*). This is truly a magnolia and not a poplar. See *Liriodendron* for description and prices, page 21.

Red Bud - Cercis

Red Bud—Judas Tree (*C. canadensis*). A native of our woods, literally covered with its red or pink blossoms early in the spring before it opens its leaves. It is an early harbingers of spring, blooming in April. It is a small shapely tree, wood very tough and the leaves large and very green in color. It may be used in heavy mass planting of shrubs, with White Flowering Dogwood or against evergreens or White Birch, making a pleasant contrast. Each 10

8-10 feet	\$1.50	\$12.50
7- 9 feet	1.25	10.00
6- 8 feet	1.00	9.00
5- 6 feet	.75	6.00

Sycamore - Platanus

American Sycamore or Plane Tree (*Platanus occidentalis*). A native, sometimes thought too common to plant. However, where a tree for quick effect is wanted, one clean in habit of growth, luxuriant of foliage and easy to transplant, this lesson of nature in distributing it so liberally should be accepted. The bark is silvery or grayish in winter, the leaves hold on well and for avenue, street, lawn and paddock shade, the Sycamore can be satisfactorily used. Each 10

10-12 feet	\$1.75	\$15.00
8-10 feet	1.50	12.50
7- 9 feet	1.25	10.00
6- 8 feet	1.00	9.00

Extra large trees can be supplied.

Willow - Salix

Weeping Willow (*S. Babylonica*). A tree of stately appearance with long pendent branches swaying their silvery foliage in every breeze, quick to take hold when transplanted, will give a finish to a lawn not obtained in any other tree. This too makes a good screen and whether planted on moist or dry grounds thrives with unusual vigor.

	Each	10
8-10 feet	\$1.25	\$10.00

PANORAMIC VIEW OF THE NURSERY

Looking Across One of Our Blocks of Evergreens.

Showing a Portion of Our Extensive Nursery

PANORAMIC VIEW OF THE HOUSE

THE NURSERY ON GEORGETOWN ROAD.

Extensive Vineyards for Propagation and Fruit.

Largest Nursery Storage and Packing House in the South.

VIEW OF OUR HOMES.

PANORAMIC VIEW OF THE NURSERY ON GEORGETOWN ROAD.

Looking Across One of Our Blocks of Evergreens.

Showing a Portion of Our Extensive Vineyards for Propagation and Fruit.

Largest Nursery Storage and Packing House in the South.

PANORAMIC VIEW OF OUR HOMES.

This is an inexpensive and permanent foundation planting. It requires less than 20 shrubs, and exclusive of the evergreen cost about \$10.00.

Deciduous Shrubs

A Home Without Trees and Flowers is a Parody on What the Word Implies

This is a most interesting division of ornamental horticulture. For here we find these interesting plants of brilliant foliage and gorgeous bloom, with attractive fruits and multi-colored berries all adapting themselves to divers use in home ornamentation. As a group they prove to be the finishing touches or tints of our picture-planted home grounds. With trees we have made our bolder outlines and shaded the grounds but to this group we come to soften the borders or edges of drives, walks and boundaries; to emphasize some lawn feature; to mellow rigid lines or sharp angles, to fill depressions, to screen objectionable views; to cover slopes or divide areas. From early spring, yes, even late winter they unfold their wondrous bowers of yellow, pink, white and red flowers on backgrounds of purple, yellow, light and dark green foliage. The attractive fruits and berries often adhere after autumn has spread its brilliant colors on the foliage. Proper selection as to height and careful choosing of varieties will insure the accomplishment mentioned and provide a source of indescribable pleasure to the owner. Refer to pages 27-43 for suggestions of arrangements.

In the descriptions that follow we give height at maturity, color of blossom and period of bloom and also designate those especially desirable for foundation planting thus (F). A table will be found on next page suggesting plants for particular places. If you do not find here the information desired we will be very glad to answer any further inquiry.

The blooming shrubs are better pruned immediately after flowering. The shortening of the tops in hedge fashion is wrong, but rather the thinning out of the older canes and branches, from the bottom is a better practice. Those that bloom on the terminal of the current year's growth, such as Hydrangea, Hypericum, etc., are better pruned back severely each winter to insure vigorous shoots for the next season.

A Well-Grouped Driveway.

PRICES, EXCEPT AS NOTED, STRONG PLANTS. EACH, 60c; 10, \$5.00; \$45.00 PER 100. EXTRA HEAVY PLANTS SUPPLIED IN ANY OF THESE LISTED KINDS STARRED *. WRITE FOR PRICES.

Suggestive Planting Key

No.	Botanical Name	Common Name	Height	Quantity
1-14	Forsythia viridissima	Golden Bell	5 -6 feet	10
2-13	Hydrangea arborescens	Hills of Snow	3 -4 feet	10
3-12	Weigela rosea	Pink Weigela	4 -4½ feet	8
4-11	Spirea Thunbergii	Snow Garland	2½-3 feet	10
5-10	Spirea Van Houttei	Bridal Wreath	5 -6 feet	8
6-9	Spirea Reevesii	Reeves Spirea	4 -5 feet	6
7	Berberis Thunbergii	Japan Barberry	2 -3 feet	12
8	Any Globe or Pyramidal Evergreen Dwarf			
A	Some heavy growing evergreen			

This is an average foundation outlay—frontage 35 feet and depth 20 feet. In some cases curvature of the beds, height of plants or color of blossom may not be satisfactory so the arrangement or the varieties may be changed to suit conditions. The worry and expense of annual planting is thus eliminated by a permanent bed of deciduous shrubs, that increases in value and grows more beautiful each succeeding year.

Shrubs For Special Purposes

WOODY PLANTS FOR PARTIAL SHADE

Mahonia	Euonymus
Abelia	Kerrias
Hypericum	Amelanchier
Snowberry	Aralia
Coralberry	Calycanthus
Hazelnut	Cercis canadensis
Privets	Chionanthus
Weigelas	Cornus
Barberry	Honeysuckle
Deutzias	Mock Orange
Forsythias	Rhodotypos
Snowballs	

FOR WINTER EFFECT

Snowberry	Red Twigged Dogwood
Coralberry	Kerria Japonica
High Bush Cranberry	Mahonia
Rosa Rugosa	Euonymus
Abelia	

FOR MOIST SOIL

Calycanthus	Snowballs
Dogwood	Butterfly
Elder	White Fringe
Tamarix	Hypericum
Spirea	Kerria

SHRUBS THAT COLOR IN FALL

Witch Hazel	Cornelian Cherry
Sumacs	Spirea prunifolia
Dogwood	High Bush Cranberry
Hawthorns	Common Barberry
Mahonia	Japan Barberry
Snowballs	Spindle Tree

BERRY-BEARING—ATTRACT BIRDS

Service Berry	Rhodotypos
Barberries	Bush Honeysuckle
Spindle Tree	Buckthorn
Dogwood	Sumac
Red Cedar	Elder
Snowberry	Wayfaring Tree
Coralberry	High Bush Cranberry
Privets	

FOR DRY SOIL

Hawthorn	Spirea
Barberry	Snowberry
Deutzia	Coralberry
Bush Honeysuckle	Aralia
Sumac	Privets

I just want to say to you that of all the clean, plantable nursery stock I ever received I am sure yours is the best. I have set five small orchards during my life and have dealt with a number of nurseries, including those whose reputation is national and of the first water, but none of them ever sent me better looking stock than I received from you yesterday.—V. V. V., Irvine, Ky.

Have received both bales of trees and shrubbery in good condition and thank you for your promptness and care. The shrubs are particularly nice specimens.—M. V. McM., Cynthiana, Ky.

The trees arrived O. K. Thanks, this is exceptionally prompt.—A. F. CO., New Orleans, La.

Abelia

Abelia (*A. Grandiflora*). (F) 2-3 feet. White. July to September. This is a new shrub. It is half hardy as in some severe winters it may be killed back to the crowns. This is not harmful to the vitality of the plant as it should be pruned every year. It will push new shoots with renewed vigor, and its beauty lies in its long arching branches covered with small shining green leaves, a mass of white bell-shaped flowers, borne in clusters. This pruning is almost a requisite; if it is omitted, your plants, unless renewed from the base, will become "top heavy" and lose the natural grace ever present in the young canes. Blooms in July and August, a period when good flowers are scarce. It is evergreen in mild winters and very distinct and unusual. Price for strong matured plants, \$1.00 each.

Amygdalus - Flowering Almond

Pink Flowering Almond (*A. rosea flora pleno*). (F) 3-4 ft. Rose-pink. April. Flowers in April, the branches being a perfect mass of blossoms from base to tip. Plants are scarce but well worth the extra price asked for it. Excellent plant in any border. \$1.00 each.

Amelanchier

***Amelanchier botryapium** (Service Berry or Shad Bush). 5-6 ft. The bush is covered with clusters of small white flowers early in the spring just as the foliage appears. Blooms in May followed with purple fruits that are ornamental and edible. Very effective planted in masses.

Apple - Flowering Crab - Pyrus

Bechtel. 10-12 ft. Pink. May. Wonderful tree in bloom, flowers being fragrant and double, resembling miniature roses. Profuse bloomer. The foliage is dull green like the orchard variety. Best used among shrubbery.

Florabunda. 10-15 ft. Deep rose. May. More vigorous in growth than Bechtel, flowers deeper in color and fruit size of a pea, being bright red. Very ornamental and should be used in shrub planting.

Aralia

***A. pentaphylla** (Five-leaved Aralia). 6-8 ft. Yellow. June. Very hardy, thriving in dry or sandy soil; with glossy, deep green leaves and light gray twigs in winter. Flowers small, borne in racemes. Rapid in growth.

A. Spinosa (Hercules' Club). 12-15 ft. Greenish-white. July. An unusually attractive small tree or shrub giving a tropical effect wherever used. Leaves are unusually long, pinnate and branches are thorny, club-shaped and upright in growth. Flowers are borne in loose clusters 8 to 10 inches wide. Thrives everywhere.

Berberis - Barberry

The Berberies are an interesting family of shrubs varying in size from 3 to 8 feet. Rich in variety of leaf, flower and fruit, and their beautiful colorings in the fall. Satisfactory for massing, bedding or as individuals.

Berberis illicifolia (Holly-leaved Barberry). (F) 3-4 ft. An upright growing shrub, with shining green leaves, terminal growth in early summer has a pleasing tint of color. \$1.00 each.

Berberis Thunbergii as a Shrub.

***B. Purpurea** (Purple-leaved Barberry). (F) 6 ft. Yellow. May. This is an English variety being one of the most attractive foliaged shrubs we have. Royal purple leaves appear in April and they are soon followed by chrome yellow blossoms. The leaves hold color well until fall. The clustered berries common to all Barberry are bright red and usually adhere well into the winter. For group or border planting when used enmasse it is very desirable. For foundations especially on lighter colored back ground it is without a peer among shrubs of this height.

***B. Thunbergii** (Japan Barberry). (F) 2½-3 ft. Yellow. June. This without doubt is the most valuable all purpose shrub offered today. It really hasn't a serious fault and can be used wherever a plant of this size is desired. Grows in semi-shady, moist or dry locations. When used as a specimen plant or as a edging plant for borders, foundations or hedges, its drooping habit, deep green foliage in the summer months and followed by its crimson coloring in the fall and red berries that hang all winter, are attractive. We grow large quantities of this and unhesitatingly recommend it to everyone that desires a hardy thrifty plant that will adapt itself to soil conditions under most trying circumstances.

B. Vulgaris (Common Barberry). 7-10 ft. May. Yellow. Tall growing green leaf variety, to be used as background or in mass plantings. Foliage in fall is very brilliant, and this variety is most productive of red berries that hang all winter.

Butterfly Bush - Buddleia

Butterfly Bush, or Summer Lilac

B. Veitchiana Magnifica (Butterfly Bush or Summer Lilac). 4-6 ft. Violet. July-Sept. A very attractive new addition to the flowering plants. While a perennial in habit, yet because of its vigor and size, it is used largely in shrub plantings. The tops in severe winter will freeze back, but it pushes with such renewed vigor this is not harmful. The flowers are borne on the tips of every bit of new growth, and in August the plants are masses of purple and violet flowers, very conspicuous, that attract butterflies.

PRICES—60c EACH; \$5.00 PER 10; \$45.00 PER 100. EXCEPTIONS NOTED. ALL PLANTS SENT ARE GOOD SPECIMENS OF VARIETY ORDERED.

VARIETIES MARKED WITH ASTERISK (*) OFFERED IN LARGE SIZES.

Calycanthus - Sweet Shrub

***Calycanthus Floridus** (Allspice). (F) 4-5 ft. Chocolate-brown. Blooms intermittently all summer. An old-fashioned shrub known to everyone. Its flowers are sweet-scented with large deep green, glossy foliage, free from all disease and holds on well until very late in the season.

Chionanthus - White Fringe

***C. Virginica**. 6-10 ft. White. May. Like preceding has been known such a long period that description seems unnecessary. The foliage is very deep green and when in bloom a mass of misty white blossoms against the foliage is most conspicuous. Fruits ornamental in large bunches. Not very rapid in growth but as a single specimen or in group proves worthy of the space occupied. It is very hardy and will thrive on any good soil making it a most useful low tree or shrub. **\$1.00 each.**

Weigela Rosea.

Cornus - Dogwood (Osiers)

C. Florida. 15-20 ft. This is really a small tree and description will be found on page 19. As a background in borders this and Red Bud are largely used.

***C. Sanguinea** (European Red Osier). (F) 6 ft. White. June. A robust shrub that will grow anywhere doing especially well on wet soil. Its branches are upright and its very attractive dark green twigs in winter make it especially valuable for mass planting. The blossom is small, followed by black berries.

***C. Siberica** (Red-twigged Dogwood). (F) 6-8 ft. Greenish white. June. Not so robust a grower as the preceding but branches are brighter red color in the winter making it even more attractive at this season. Pruning the old wood out to encourage new growth increases its brilliancy of color when used in conspicuous places.

***C. Mascula** (Cornelian Cherry). 7-10 ft. Yellow. April. An erect growing shrub bearing a profusion of flowers early in the spring before the leaves appear. The berries that follow are scarlet and the foliage in the fall usually is highly colored. An excellent plant for screening purposes or background. Thrives especially on moist soil.

Cotoneaster

C. horizontalis. (F) 2½-3 ft. White. June. Plants of this variety are more horizontal than any other. The spreading branches with their small glossy green leaves which often remain all winter makes this a most attractive plant. Red berries usually adhere until the new foliage starts the succeeding spring. For a creeping plant in foundations, evergreen or rockery planting this is unexcelled. A little difficult to establish but well worth a trial as we consider it one of the best creeping plants we have. **\$1.00 each.**

C. macrophylla (Small-leaved Cotoneaster). (F) 2½-3 ft. White. June. Very much like the preceding except the leaves are silvery green and a little more compact in growth. Both have similar uses. **\$1.00 each.**

C. Simonsii. 3-4 ft. White. June. This is a semi-evergreen but more erect than the preceding varieties. Leaves are dark green and

usually adhere late in the season. Showy bright red fruit borne on the slender, erect branches all along the stems. **\$1.00 each.**

Crataegus - Hawthorn

***C. Crus-Galli** (Cockspur). 10-12 ft. White. May. A native thorn of great value for hedging, screening or mass planting. Very dense in growth with large, dark, glossy, green leaves that usually are highly colored orange and red during the autumn months. Fruit is a brilliant scarlet. Is very hardy and will grow in any good soil. **\$1.00 each.**

Diervilla - The Weigelas

An important genus from Japan that is almost indispensable for ornamental planting. They thrive in any soil and in partial shade. Produce a wealth of bell-shaped blossoms along the branches in June and often sparingly during the summer. When young they are upright, but when older become more graceful.

***W. candida**. (F) 5-6 ft. White. May. Most vigorous of the Weigela variety. Flowers are large and quite showy. In exposed places the tops are sometimes injured in severe winters. Very rapid in growth and seems to thrive better in light soil.

***W. Eva Rathke**. (F) 3½-4 ft. Crimson. June. Of smaller growth than the other Weigelas. It is decidedly spreading in character of growth and also attracts attention in bloom with its brilliant colored flowers with white throats. It is specially showy and if given a preference of light soil and slight shelter will prove an excellent variety.

***W. rosea**. (F) 4-5 ft. Pink. June. This is no doubt the most popular Weigela sold today. Its delicate pink blossoms are borne in great profusion all along arching canes making it an object of unusual beauty at blooming time. Foliage bright green and healthy.

PRICES—60c EACH; \$5.00 PER 10; \$45.00 PER 100. EXCEPTIONS NOTED. ALL PLANTS SENT ARE GOOD SPECIMENS OF VARIETY ORDERED.

VARIETIES MARKED WITH ASTERISK (*) OFFERED IN LARGE SIZES.

Deutzia.

Deutzia

A Japanese shrub noted for its hardiness, fine habit, foliage and profusion of attractive flowers which are borne in racemes during June. The small florets are similar to double Lily of the Valley. If this shrub were better known, especially in the taller growing varieties, it would become one of the most popular plants used today.

***D. candidissima.** (F) 6-8 ft. White. June. A very useful shrub with sweet scented flowers in long clusters. It is rapid in growth, thrives in any good soil and is a free bloomer.

***D. gracilis.** (F) 1½-2½ ft. White. May. Dense in growth. Blooms profusely in small racemes on arching branches; an excellent low growing shrub for border planting. In shady locations the foliage sometimes is troubled with leaf spot.

***D. Lemoinel.** (F) 2½-3½ ft. White. June. Flowers are larger than preceding and borne in great panicles. A semi-erect shrub; very satisfactory wherever used.

***D. Pride of Rochester.** (F) 6-8 ft. Pinkish-white, June. This is the most popular of the taller growing Deutzias. It is very hardy, adapts itself to any type of soil and is an excellent blooming variety.

Euonymus - Spindle Tree

E. Europæus. 10-12 ft. Yellow. June. This is one of the best erect plants offered today. In habit it resembles our native strawberry bush or Wahoo, being a pretty upright growing shrub with dark green foliage. Particu-

larly is it valued for its conspicuous red berries, unusual in shape, appearing in late summer and hanging on well into the winter. Very valuable for its foliage coloration in autumn. Should be planted more frequently.

Forsythia - Golden Bell

Pretty shrub of medium size, blooming in spring before the leaves appear. Flowers are yellow, drooping, and are borne along the stem. Exceptionally hardy and thrive in any locality.

F. suspensa. 6-8 ft. Yellow. April. A drooping variety that makes a desirable bush when planted alone or can be made to arch trellises, etc.

***F. Fortunei.** (F) 6-8 ft. Yellow. April. A form of *F. suspensa*, but with more upright branches and darker, heavier foliage.

***F. viridissima.** (F) 6-8 ft. Yellow. April. This is decidedly the most popular of the Golden Bells. It blooms unusually early in the spring and is especially conspicuous. The foliage is always a deep glossy green and never diseased. A most valuable shrub for home planting, especially since the branches may be cut in the winter months, brought into the house and placed in water, where they will open out and bloom equally as well as those left on the plant.

Halesia - Silver Bell

***H. Tetraptera.** (Silver Bell). 10-12 ft. White. May. A small tree open in growth and best used in mass planting, forming an excellent background for lower growing plants. The flowers resemble Snowdrops and completely cover the shrub. The foliage is light green but attractive and the plant thrives in all soils and will grow in partial shade.

Hibiscus - Althea - Rose of Sharon

(F). 6-10 ft. Free growing shrubs that are especially desirable because they bloom at a time of the year when there are few flowers, July and August. Valuable for a flowering hedge to hide an undesirable background or as individual specimens. In single we can furnish white and pink shades, in the double we have pink, red, purple and white. Order to color.

Hydrangea

No class of shrubs are better known than the Hydrangeas. Transplant easily, have no disease, and bloom in the summer when there is scarcity of flowers.

H. arborescens grandiflora. (F) 3-4 ft. White. May and June. (Also Hills of Snow, Summer Hydrangea or Snowball Hydrangea). This magnificent hardy American shrub is the very finest addition to this class of plants found in many a year. The blooms are of the very largest size, of pure snow-white color and the foliage is finely finished. One of its most valuable characteristics is its coming into bloom just after the passing of the early spring shrubs; while its long period of bloom from early June through August, makes it doubly valuable not only to the florist, but to every owner of a garden. Perfectly hardy. Habit of plant excellent.

H. paniculata grandiflora (Great paniced Hydrangea). (F) 4-5 ft. White. August. Commonly known as hardy Hydrangea. This popular variety does not bloom until August and September. The large spikes are first greenish white, then pure white, later changing to bronze pink.

PRICES—60c EACH; \$5.00 PER 10; \$45.00 PER 100. EXCEPTIONS NOTED. ALL PLANTS SENT ARE GOOD SPECIMENS OF VARIETY ORDERED.

VARIETIES MARKED WITH ASTERISK (*) OFFERED IN LARGER SIZES.

Hypericum - St. John's Wort

H. moserianum. (F) 1-2 ft. Yellow. July to September. This rather unique low growing shrub always attracts attention. Flower a beautiful rich yellow, borne on slender stems, surrounded with rather roundish, leathery green leaves throughout the summer. During severe winters it often kills to the ground but next spring will come back more vigorous than before.

Kerria - Corchorus

K. Japonica. (F) 3-4 ft. May, June. Yellow. Slender shrub, stoloniferous, with bright green branches, which remain so during winter. Foliage a deep green forming a pleasing background for the single yellow flowers that come throughout the summer months.

K. Japonica flore pleno. (F). Identical to above, save globe shaped double flowers from July to October.

Ligustrum - Privet

A group of ornamental shrubs most desirable for landscape work, and often lost sight of because they are thought of as hedge plants only. Not particular about soil, and grow well in partial shade. They have bright green leaves which remain on well and are seldom attacked by insects.

***L. amurense** (Amoor River Privet). (F) 6-10 ft. White. June. A small leaf, almost evergreen variety of Privet that is much used for hedges. Desirable to give body mass planting of shrubbery or as individual specimens.

L. ovalifolium (California Privet). 6-10 ft. White. June. This we grow in quantity for hedge, but as an individual plant few excel it either in wealth of creamy flowers or exquisite beauty of form and foliage. Semi-evergreen. See hedge plants.

***L. regelianum** (Regel's Privet). (F) 5-7 ft. White. June. A low, spreading variety being very twiggy, with a dense foliage not so glossy as California. Because of its graceful appearance, hardiness and adaptability to any soil and shady places, it is the most widely used Privet for landscape work.

Magnolia

We have none of the Chinese Magnolias to offer as these were first grown in Europe and imported heretofore. They are quickly becoming obsolete in American nurseries. A quarantine in effect prohibits importation of quite a few of these useful plants. See ornamental trees page 21.

Mahonia - Ashberry

M. aquifolia (Holly Leaf Mahonia). (F) 2-3 ft. Yellow. May. Its shining, dark green, prickly foliage, which turns to bright bronze in winter, and the fact that it will thrive under trees in the shade makes it popular. An evergreen that is useful to plant with other shrubs or along foundations. In planting, strip off all the leaves and much better results will be obtained in getting them to live. As the new growth appears for the first year or so, if after two or three leaves are formed one will pinch off the canes, this will make the plants bushy and increase the size of the foliage. **Plants, 18 in., \$1.00 each.**

Philadelphus - Mock Orange or Syringa

A tall, vigorous and hardy bush. It bears profuse white flowers resembling orange blossoms. These shrubs are very valuable for background screens, grouping or specimens. Beautiful white flowers are fine for cutting.

***P. coronarius.** (F) 6-8 ft. White. June. The old-fashioned mock orange, well known to everyone because of its waxy white, fragrant flowers. It proves a specially good plant for every use, the foliage being large, oval in shape and deep green. For cut flowers it is valuable and pruning in this manner often keeps the bush confined where it is not desirable to have it grow too tall.

P. grandiflora. 7-10 ft. White. June. This is a French variety, a most vigorous grower but lacks the fragrance of the former. Blossoms are really larger and as attractive. Rapid in growth and one of the best.

P. Lemoinei erectus. (F) 4-5 ft. White. June. This is a smaller growing type of moderate height. The branches are slender and arching, flowers being double, in large racemes and very fragrant. Foliage is healthy, good color, making it a very desirable shrub of its height and season.

Pyrus - or Cydonia

P. Japonica (Japan Quince or Burning Bush). 6-8 ft. Scarlet. April-May. No doubt one of the most attractive spring blooming shrubs, blossoms always large produced in great masses just as the leaves are coming out. Foliage is a dark glossy green. The plant is free of disease and if it can be kept free of San Jose scale will pay for the space it occupies in any planting.

Rhodotypos

***R. kerrioides** (White Kerria). (F) 4-5 ft. White. May and June. Very ornamental shrub with bright green, pleated leaves and large white flowers one-half to one inch across. These are produced in the end of the branchlets and are followed by conspicuous shining black fruits that adhere practically all winter. A desirable shrub.

Rhus - Sumac

The Sumacs as a class appeal to the planter most for the wonderful fall coloring of the foliage.

***R. cotinus** (Purple Fringe). 12-16 ft. Better known as Smoke Tree. Flowers in loose panicles which become purple and give tree a smoky appearance in early fall. Foliage of bright green and glossy color.

***R. glabra** (Smooth Sumac). 10-15 ft. One of the best of the Sumacs to produce natural effects.

R. laciniata. 8-10 ft. A cut-leaf form of the above that looks like a fern, tropical in appearance and showy.

***R. typhina** (Staghorn Sumac). 10-12 ft. A large shrub or tree much used in landscape background work. Brilliant red foliage in the fall.

Rosa Rugosa - Japan Rose

R. rugosa (Single Japan Rose). Pink and white. May to September. Upright, hardy shrubs with very thorny branches. Leaves are dark green, pubescent and pleated. Flowers are frequently two inches across and very showy. The fruits (hips) that follow are also bright red colored and very ornamental. The plant is very desirable for massing and to get the best blossoms occasionally cut out the old wood to encourage new growth.

HYDRANGEA P.O.

Sambucus - Elder

S. nigra aurea. 8-10 ft. White. June. One of the best yellow foliage plants. Retains its color the entire season and is very conspicuous in every planting. Quick to establish itself, robust grower and attractive.

Spirea - Meadow Sweet

This family contains more attractive varieties than any. They range in height from very dwarf to tall, color of blossom from white to red, and period of bloom from early April to August. It contains a large number of species and those we catalogue are really the choicest. All are very attractive and they are not particular as to soil.

S. Anthony Waterer. (F) 2 ft. Bright pink. June and July. A compact low growing shrub with dense foliage usually deep green with occasional variegated leaves of pink and white on young growth. Flowers are borne in full flat clusters on erect stems. If these are cut away when they fade the shrub will usually bloom intermittently during the summer. Very valuable for edging in front of shrubbery or sometimes used as a dwarf hedge.

**S. Billardi rosea*. (Billard Spirea). 5-6 ft. Bright pink. July and August. Erect in habit of growth, red-brown branches and dull green foliage. The terminals always crowded with dense spikes six inches long; bright pink. Grows anywhere and is found especially serviceable on hill sides and dry places.

S. callosa rosea. (F) 3 ft. Deep pink. June and July. Really a taller form of Spirea Anthony Waterer. A little more open in growth and if blossoms are cut away it will flower most of the summer.

S. Douglasii. 6-8 ft. Deep pink. July. Slightly taller and a little more branched than Spirea Billardi. Flowers a shade deeper, otherwise

in character of growth, habitat and general characteristics like Billardi.

S. prunifolia (Plum-leaved Spirea). (F) 5-6 ft. White. April-May. This is an old-fashioned variety, flowers borne close to the slender erect branches in the spring before foliage appears. The individual flowers resemble miniature roses and are usually borne in great profusion. The foliage is shiny dark green and in the fall turns bright red.

S. Reevesii flora pleno. (F) 4-5 ft. White. May. This is one of the best of the Spirea group. The very double, white flowers borne along the stem just as the foliage appears makes a most attractive bush wherever used. They remain in bloom often two weeks or more. The foliage appears early and remains exceptionally late in the fall. In habit it is very graceful and can be used in foundations where plants of this height are desired. It is not used so often as it should be, being without doubt one of the best white flowering plants known today.

S. Thunbergii (Snow Garland). (F) 2½-3½ ft. White. April. The extra early flowering species is the pride of the Southland. It is spreading in growth with arching slender branches that are a perfect mass of minute flowers followed with exceptionally delicate green foliage. For edging purposes it has few equals and we recommend it highly.

S. Van Houttei (Bridal Bower or Bridal Wreath). (F) 4-6 ft. White. May. This is the most useful of the hardy shrubs. It has grown so popular that we sell more of it than any other variety we grow. The flowers are in flat clusters usually an inch or more across produced on spreading, pendant branches often drooping to the ground. In full bloom they are a mass of white and never fail to attract attention. The foliage is an attractive green which it retains late in the year.

PRICES—60c EACH; \$5.00 PER 10; \$45.00 PER 100. EXCEPTIONS NOTED. ALL PLANTS SENT ARE GOOD SPECIMENS OF VARIETY ORDERED.

VARIETIES MARKED WITH ASTERISK (*) OFFERED IN LARGER SIZES.

Symphoricarpos

- S. racemosus** (Snowberry.). (F) 4-5 ft. This shrub has small pinkish flowers in July, followed by white berries which remain on well into the winter.
- S. vulgaris** (Coralberry, Buck Bush, Indian Currant). 4-5 ft. A very hardy, tough shrub that can be established where others fail. Its wealth of coral-like red berries are quite showy during winter. This and the Snowberry go well together.

Syringa - The Lilacs

No shrubs are better known or more deservedly popular than the lilac.

Lilac (Persian). 6-8 ft. Pale lilac. May. Small foliage and bright purple flowers. Plants offered are 2-3 feet only.

***Lilac** (Purple). 7-10 ft. The well known old-fashioned variety with purple fragrant flowers in May.

***Lilac** (White). 6-8 ft. Same as the above but with white blossoms.

Tamarix

Shrubs of strong but slender, delicate growth similar to the asparagus. The pink flowers, filmy foliage and gracefulness make them one of the most desirable shrubs for background or inter-planting. Will grow in poor, dry soil where other shrubs fail.

A. aestivalis. (F) 6-7 ft. Pink. June. This species has bluish-gray foliage, carmine pink flowers, and also blooms late in the summer.

T. Africana. 7-10 ft. Deep pink. April and May. This is the most vigorous of any. Sea green foliage and pink flowers; blooms early.

Viburnum - The Snowballs

In this group are some of the most conspicuous shrubs for blossom, berries or autumnal foliage we have. They are all hardy, vigorous and healthy. For individual specimens or shrubby borders they are desirable. Most of them will grow in partial shade but do better in the sun.

***V. lantana** (Wayfaring Tree). (F) 10-12 ft. White. June. A large, vigorous shrub with soft, heavy lantana-like leaves and large clusters of white flowers in May, succeeded by red berries which turn black as they ripen.

***V. opulus** (High Bush Cranberry). 8-10 ft. White. May. Strong, rather spreading habit with single white flowers borne in flat clusters. The very showy red fruit which follows and the beautiful coloring in the fall go to make it one of the best.

V. plicatum (Japanese Snowball). 6-8 ft. White. May. This species is one of the most satisfactory shrubs grown. Its pure white double blossoms with a setting of dark pleated leaves and perfect form make it one of the best. Fine for an individual specimen or in groups.

***V. sterilis** (Old-fashioned Snowball). 10-12 ft. White. May. This old-fashioned variety is well known to every lover of plants. Its balls of pure white, literally cover the bush when in bloom.

Xanthorrhiza

G. Sorbifolia (Ash-leaved Spirea). Cream. July. Blooms in July in long white spikes. Foliage resembles an ash somewhat. Valued for shady, moist locations.

PRICES—60c EACH; \$5.00 PER 10; \$45.00 PER 100. EXCEPTIONS NOTED. ALL PLANTS SENT ARE GOOD SPECIMENS OF VARIETY ORDERED.
VARIETIES MARKED WITH ASTERISK (*) OFFERED IN LARGER SIZES.

Privet Hedge.

Hedge Plants

A living fence—one made of plants, attractive with their green leaves, formally trained or arched branches, colored foliage or bright berries is surely more pleasing than the still, rigid, mechanical effect obtained by the similar use of wood or metal. A lawn hedge is permanent—once planted, only occasional pruning or shearing is required. It is better practice in pruning to round rather than to shear perfectly flat on top, as this gives the bottom and side branches an opportunity to reach the sunlight and air necessary for full development of the hedge at its base and near the ground line. Hedges pruned square on top simply form a shade for these lower branches, which soon become weak in growth, and the hedge row becomes unsightly because of the meager foliage near the base. Hedges of flowering plants should never be pruned formal, but allowed to develop naturally, sneaking out only occasional canes that are ungainly.

For hedges you may use a variety of plants, including not only the privets and barberries, but flowering shrubs like Hydrangeas, Purple-leaved Barberries, Altheas, Spireas, Fragrant Bush Honeysuckle, Evergreens, in fact any of the compact growing shrubs may be used. Prices on these will be quoted on application.

Distances Apart to Plant—Privet, 6-10 inches; Japan Barberry, 8-12 inches; Flowering Shrubs, 2-2½ feet; Norway Spruce, 3-6 feet.

California Privet

A semi-evergreen hedge with thick, shining leathery leaves, that grow very thickly, can be pruned into any formal effect and planted by everyone needing a quick hedge without much expense and trouble. It blossoms in spring, the fragrant white flowers being noticeable for some distance. In planting it is a good idea to cut away practically all the tops of the smaller plants in order to get a bushy hedge. Prune severely leaving only 5-6 inches of wood remaining. We have quantities of this desirable variety.

	100	1,000
—1 year, 12-18 inch	\$5.00	\$40.00
1 year, 18-24 inch	6.00	50.00
2 year, 2-3 feet	8.00	70.00
2 year, 3-4 feet	10.00	80.00

Amoor River Privet, South

Semi-evergreen hedge that grows quickly. Occasionally it freezes to the crown in a severe winter, but always comes back with renewed vigor.

	Per 100
12-18 in.	\$10.00
18-24 in.	12.00
2-3 ft.	15.00

Regal's Privet

This is the hardest of the Privets we sell. It is semi-drooping in growth, making thick hedges from the ground line, growing 6-8 ft. if left unsheared. Those wanting real permanency, or privacy where a low hedge is wanted, plant this one.

	Per 100
12-18 in.	\$10.00
18-24 in.	12.00
2-3 ft.	15.00

Thunberg's Barberry

This Japanese shrub is being used more and more as a hedge. Not as quick in growth as C. Privet, but absolutely hardy. Its small, glossy leaves are out early in spring, succeeded by yellow flowers. The foliage turns a bright red in the fall, and this is followed by red berries. It is a graceful, drooping shrub, making an elegant variety for hiding foundation walls or planting in the corners by steps, etc., also does well in shady places. Especially remarkable for its brilliant red berries, remaining fresh until spring, and for its dazzling fall coloring. Our heavier bushy plants will make immediate effect when planted.

	10	100	1,000
12-15 inches	\$2.00	\$15.00	\$150.00
15-18 inches	2.50	20.00	175.00

Norway Spruce

For an evergreen hedge, absolute screen of objectionable views or wind break, winter or summer, this is the most desirable evergreen for the purpose known. They may be planted 3-6 feet apart, depending on the compactness of the resultant hedge desired. These trees may be sheared in any conceivable manner, responding to pruning very kindly. The specimens we offer have been transplanted, and have good root systems.

Prices on application.

Other Hedge Plants

Common Barberry	Snowballs, etc.
Cornelian Cherry	Purple Barberry
Hydrangeas	Deutzias
Fragrant Bush Honey-suckle	Altheas
	Spireas

Prices on application.

Hall's Japan Honeysuckle.

Climbing and Clinging Vines

With their variance in color, their beauty of foliage and blossom, their grace wherever used, these vines frequently provide the finishing touches of any planting. Some adhere to the masonry, some must be trained through lattice or trellis and others with their tendrils will cling tenaciously, unshaken by wind or weather. Visualize the effect desired and train them accordingly to cover your walls and pilasters, your lattice or trellis, the pergola or laundry posts, the porch or portico, veranda or on the fence for shade, grace or flower and let them ramble in their plentitude—objects of beauty and a pleasure to the planter.

Ampelopsis

- A. Englemanni** (Improved Virginia Creeper). Valuable for covering old fences, etc. Leaves red in fall. **50c each.**
- A. veitchii** (Boston Ivy). The beautiful self-clinging vine that is used to cover walls of stone or brick. Leaves form a dense sheet of green as they overlap each other; a little difficult to start, but when once established requires no further care. Foliage changes to a crimson-scarlet in the fall. **50c each.**

Clematis Hybrids

These popular vines are known and planted everywhere for the profusion of beautiful, large flowers they produce. Not as hardy or healthy as *C. paniculata*, but when once established are worthy of all the extra care in getting them started.

- C. Jackmanii.** Large purple. **75c each; 3 for \$2.00.**
- C. Andre.** Large red. **75c each; 3 for \$2.00.**
- C. Henryii.** Large white. **75c each; 3 for \$2.00.** We import our stock of these.
- C. Paniculata.** The small white, sweet-scented varieties that are beautiful both in foliage and blossom. **50c each.**

English Ivy - *Hedera Helix*

Hedera Helix (English Ivy). An excellent evergreen vine, with glossy green leaves unexcelled for covering walls in shady or cool places. May be used for porch or window boxes for all year effect. When closely sheared makes a good edging for walks or borders, being hardy and evergreen.

Euonymus - Bittersweet

E. radicans. A slow growing vine, that adheres to the masonry and remains deep green all winter. For tall foundation and where only a small vine is wanted this will be excellent.

E. radicans variegata. Same as preceding except foliage is margined with white; on dark walls this proves as effective as *radicans*.

E. radicans vegetus (Evergreen Bittersweet). Another evergreen clinging vine of more robust habit, perfectly hardy and especially valued because of the profusion of red berries that hang on for several weeks. Attaches itself to either wood or masonry and from all indications this will prove one of the most valuable vines, once it becomes well known.

Honeysuckle - *Lonicera*

Hall's. This is the popular evergreen honeysuckle, used by everyone for screen, beauty and fragrance. Blooms continuously and easy to establish. It is also evergreen, holding its foliage all winter.

Coral Honeysuckle. Flowers bright scarlet, little fragrance. Strong grower and hardy.

Kudzu Vine - *Dolichos Japonica*

We have so many calls for a very rapid growing twining vine to cover unsightly objects, for quick effect where other vines are too slow, that we list this vine. It belongs to the pea family, has insignificant flowers, but the foliage is very large, of attractive green color, and specimens have frequently grown 30 feet in a season after established.

Trumpet Vine - *Bignonia*

A robust, woody vine, twining tightly with numerous tendrils along its stems. Leaves are dark green. Very desirable for covering summer houses, arbors, trees or rustic bridges.

B. radicans. The most familiar variety, with its scarlet flowers. Native. **50c each.**

B. grandiflora. Earlier and larger than *B. radicans*, flowers a beautiful orange red. **50c each.**

Wistaria

A rampant clinging vine that has the robust vigor of wild grape and the matchless beauty of a rare exotic. Colors both white and purple.

THREE BEST HARDY PHLOX

Phlox Pantheon.

Richard Wallace.

Landseer.

Hardy Perennials

For permanent planting, for variance, for beauty of flower and pleasure, the perennial plants offer a field from which one may select in color, or in period of bloom, plants to suit the tastes of the most fastidious. Our list includes only the most desirable ones. There are hundreds of varieties and kinds, many are meritorious, but for the average bed, group or border, one will find the selection that follows, suitable to ordinary purposes.

May it be said that these plants thrive better in fertile ground, and plenty of moisture; should be well cultivated and kept free of weeds for best results. For the sake of neatness after the blooming period the flower stems should in part be cut out, being careful to leave sufficient foliage to conduct the natural functions of the plants.

Ordinarily perennials are set 18 inches apart for the larger growing and 15 inches for the dwarf plants. In planting a border, if one will mark his rows going each way so as to make squares the number of plants is quickly ascertained, the arrangement as to height is easily arrived at and the grouping or planting made easy by alternating or varying a few inches from these rigid lines. Mulching for winter protection is necessary, care must be taken not to smother the plants by covering the crowns.

Achillea - Yarrow or Milfoil

A. *Boule de Neige* (Ball of Snow). 2 feet. A mass of pure white double flowers coming in July and blooming for a long period. For mass effect or for cutting it is valuable.

Anchusa

We offer the deep blue shade of this excellent perennial. It grows four to five feet, and sometimes needs staking. Blooms in May and the giant stalks are a mass of pretty blue flowers. For the background of a hardy border this is indispensable where blue color is wanted.

Aquilegia - Columbine

Blooming in late spring and through the early summer months, preferring slightly shaded positions, though it does well in the sun. The flowers are borne on slender stems and mostly long spurred—coming in the many shades they do, prove very valuable in any border. 2-3 feet.

Delphinium—Larkspur.

PRICES—25c EACH; \$2.00 PER 10; \$18.00 PER 100.
EXCEPTIONS NOTED.

Iris.

Hollyhocks

Everyone knows them—with their long spikes of multi-colored flowers, borne in profusion as they are, there is no wonder they are so largely used. Blooming in June and July, so absolutely hardy that they will take care of themselves.

Single Hollyhocks. 5-6 feet.

These are seedlings, grown from the very best plants of Senator J. N. Camden's gardens, and anyone who has seen them in bloom there knows their wonderful beauty.

Prices do not always represent inherent value, for often the true worth of plants are embraced in the reputation of the nurseryman from whom you purchase.

Asters - Michaelmas Daisies

Blooming in September and October, and being hardy they are very popular. Colors are pink, purple and white. 3-4½ feet.

Buddleia - Butterfly Bush

(See shrubs page 28.)

Chrysanthemums

These are hardy and most attractive in September and October. In planting these try to group them as some seasons it may be necessary to save from early frost by covering with sheets. Height 2-3 feet. The flowers are very attractive, borne in large quantities. Colors, white, pink, red and yellow.

Coreopsis

A beautiful yellow flower, desirable for cutting or for border. Blooms in June, flowers being two inches across when well grown. After blooming the tops may be cut away and a good secondary blossoming will follow all through the summer. The best yellow flower for the border. Height 2-3 feet. Graceful.

Delphiniums

A blue flower, whose praises have been sung by every lover of a hardy border. The flowers are borne in great spikes, the first coming about the first of June. These may be cut away and young growth will start from the crown producing some bloom all through the summer. Height 3-4 feet. Mulch slightly as the crowns sometimes rot over winter.

Belladonna. Light turquoise blue, the most continuous bloomer of the two varieties.

Formosum. The deep or dark blue, lighter centers and a robust grower. The best of the dark shades.

Gaillardia - Blanket Flower

Will grow anywhere, bearing large quantities of yellow flowers flecked and marked with crimson and brown. Starting in June, there are blossoms all summer. One of the most desirable plants for the home garden and the flowers are valued for cutting.

A Border of Francois Ortegat Peonies.

Helianthus - Sunflower

Miss Mellish. A beautiful yellow, blooming in August and September, flowers being 2 inches across and on strong stems. The flowers are single and the foliage free from disease. Spreads quickly and produces tall stalks 5-7 feet.

Hibiscus - Mallow

A fine plant, producing single bell-shaped flowers frequently 4-6 inches across, and blooming over a long period. The bush attains a height of 5 feet and is perfectly hardy. Valuable acquisition to the perennials. Flowers borne in July and August. Pink and white.

Hardy Grasses

This group contains very valuable plants for beds and borders, parks or cemeteries, under trees or alongside of lakes or ponds. They are very effective. Because they do not produce highly colored flowers but filmy spikes or plumes they have been neglected. Their ease of transplanting, freedom of disease, and the grace of their falling blades should be points in their favor.

Arundo donax (Giant Reed). This variety grows to a height of 12 to 15 feet, and is especially desirable for background, the central feature of a bed planted with grasses, or to screen undesirable outlooks. Its long drooping bright narrow green leaves resemble a healthy stalk of corn though more artistic.

Eulalia Japonica. 5-6 feet. A hardy grass of robust growth and light green leaves. Used largely for backgrounds or centers of beds.

Eulalia Gracillima. 3-4 feet. This is the most graceful of the grasses, and therefore most popular. For individual or mass planting it is unexcelled.

Eulalia zebrina. Similar to Japonica, being as the name indicates cross striped with white.

Iris

There is a peculiar charm about the Iris that appeals irresistibly to those whose taste for the refined and delicately beautiful, leads them to seek a closer acquaintance with it. Its iridescent coloring, fragile, orchid-like formation is often unnoticed by the careless observer. But those who only know the Iris as "flags" have never really examined "the rainbow flower," "messengers from the Queen of Heaven to mortals on earth." We want you to plant some of them, especially the Japanese variety, and see that one investment means years of beauty. Cultivation is simple. They will last indefinitely when once established.

German Iris

These are the old-fashioned flags, and the varieties we offer are exceptionally meritorious, being selected for variety and distinct coloring. **Black Prince.** Standards deep blue, falls purple. **Florentina alba.** Standards and falls white, tinged with yellow and blue.

Honorabilis. Standards golden yellow, falls rich mahogany brown.

King. Standards lemon-yellow, falls satiny brown, edged sulphur.

Loreley. Falls slightly yellow, heavily veined purple. Standards yellow.

Pallida dalmatica. A tall variety. Lavender shading to blue.

Pauline. A striking lavender-violet variety.

Sherwin Wright. A golden yellow with practically no marking.

Spectabilis. Standards pale lavender, falls blue and old gold.

Queen of May. A soft rose-lilac, almost pink.

Walneri. Standards lavender, falls a purple-lilac.

Japan Iris

This is the latest blooming of the Iris. Any one not familiar with these has missed one of the glories of the garden. They bloom in June, being the largest, showiest and contain varieties that for variance of color and beauty are unsurpassed by any perennial. Prefers moist soil, but blooms exceedingly well on any type. We are limited in several varieties and will have to substitute if sold out when order is received. We list six varieties to color and letter as the names are difficult to pronounce. They are all delicately and variously veined and shaded, all being favorite sorts.

A. White.	D. Rose.
B. Dark purple.	E. Mauve.
C. Lavender.	F. Blue.

Monarda - Cambridge Scarlet or Bergamot

A very brilliant colored flower, unusual and attractive, coming in July and if the old blossoms are pinched out there will be a continuous bloom until fall. Succeeds everywhere, and should be in every border. The foliage if crushed is aromatic, reminding one of mint. Grows 2½-3 feet.

Pyrethrum - Painted Daisy

One of the most desirable perennials, blooming in May and June. Very similar to daisies but more attractive. We list only the rose shade, this being the most attractive. 2-3 feet.

Phlox

Nothing grows in the perennial class that is as satisfactory as the Hardy Phloxes. They are wonderful in their many shades, their profusion of bloom and general good character. Our list is not large but the very best varieties of their respective shades from a test row of many kinds. It is a good idea to break out the flowering spikes after they have finished blooming. Root prune or transplant every few years.

(Sir Edward) Landseer. A brilliant, pleasing shade of salmon-red, very striking.

(Frau G. Von) Lassburg. A late white, producing great spikes or trusses of pure white flowers. Fine.

(Miss) Lingard. Another white but blooms in April. Removing the seed spikes a good second bloom is to be had. Best white known. Early.

Pantheon. Just as soft, pleasing shade of rose-pink as could be had in a Phlox. Blooms in July and very fine.

(Sir Richard) Wallace. Vigorous grower and pronounced the best of its season. White with violet center. Attractive.

Physostegia - False Dragon Head

A beautiful mid-summer perennial forming long and dense spikes of small and delicate pink tubular flowers.

Platycodon- Japanese Bellflower

This comes in blue and white. Blossoming in July, the attractive flowers, often three inches across, come in succession for several weeks. Height 2½-3 feet.

Poppies

These are Oriental Poppies, vivid shade of red, blooming with the peonies and the joy and admiration of everyone. Plant a few of our divisions and have flowers the first season. 2-3 feet. We advise fall planting only.

Rudbeckia - Golden Glow

A yellow blooming perennial, that has become popular in a very short time since being introduced. The flowers in July and August are like small Chrysanthemums borne on the terminals of the 5-6 foot stalks. Very desirable. They are of the easiest culture, perfectly hardy and very free-blooming.

Shasta Daisies

Vigorous growing plants, height 2½-3 feet, simply masses of wonderful daisy-like flowers borne on great stems. They are fine for cutting for the house or mass effect in the border.

Sweet Williams

Another good old-fashioned plant, so well known that description is not necessary. Flowers in June and is a picture with its white, violet and crimson blossoms. No old-fashioned border is complete without their cheerful, sweet-smelling and showy flowers. 18-24 in.

Tritoma - Red Hot Poker

This blooms from July until frost time. The flower spikes are bright red cone-like heads that protrude above the drooping green leaves several feet. It is rather unusual and attractive. 2-3 feet.

Yucca - Adam's Needle

Y. Filamentosa (Adam's Needle or Thread Plant). A stately evergreen thread-leaved plant producing spikes of creamy white flowers, borne on tall stems. The individual flowers resemble the tube rose. Desirable to plant about a grave or wherever it may raise its majestic head in full array.

Peonies

No other perennial compares favorably with the peony. It is so distinct, possessing many good qualities, that it is the standard of perfection. Ease of culture, hardiness, freedom from disease are qualities sought after and found in this grand old-fashioned flower. Like the oak, it seems to improve each succeeding year in size and beauty. The newer and improved varieties rival the rose in delicacy of color, fragrance and general beauty. No other large showy flower equals it singly, as a bouquet or for general decorative work. It thrives best in deep, rich, sunny exposure, though does well in partial shade. A covering of leaves or well rotted manure each fall adds to its thriftiness. It may be used in the open border, along drives and walks, intermingled with shrubbery or other perennials, or in the background along the fence. We have spent much money and energy to collect the best and offer with confidence the following varieties in strong divided roots.

Price of all Peonies, 50 cents each; \$4.50 per 10.

White Peonies

Festiva Maxima. The grandest of the whites. Early. The flowers are extra large, color a pure white save carmine tipped petals. Has no equal.

Couronne d'Or. A cream colored white, compact blossom and very desirable. Late.

Duke of Wellington. A midseason white of unusual vigor, often having several blossoms to each stem.

Mad. de Verneville. Another very desirable white variety, free bloomer and should be in every collection.

Red Peonies

Francois Ortegat. A midseason to late variety, being very dark rose color with yellow stamens; flowers large on strong stems. Extra good.

Delachei. A late deep rich red, of unusual color. An old favorite and esteemed by everyone that knows it.

Felix Crousse. A mid-season variety of the most pleasing velvety red color, fading to lighter shades as the blossom falls.

Pink Peonies

Asa Gray. A soft shell pink, mottled and veined rose. Midseason, and plant vigorous. Supply limited.

Alexander Dumas. A strong midseason free-growing pink of deep and pleasing color.

Faust. This is an old favorite shell pink variety, midseason to late, a favorite with everyone that knows it.

Fragrans. Another deep rose of different season, valued for its fragrance and freedom with which it flowers.

Humci. The best late pink, American Beauty shade. Plants graceful and free flowering.

La Tulipe. Of late season, compact blossom, white with streaks of red and pink on many petals. Resembles the tulip somewhat.

Margaret Girard. Another delicate pink, mid-season, of great vigor and size.

Yucca—Adam's Needle.

Pink Cochet Rose.

Roses

After years of breeding, experimentation and testing, rose varieties have advanced many steps beyond the gardens of our grandmothers, so wonderful in June. Now we may have a succession of blossom all through the growing season, in colors and shades to suit every fancy. It can be used everywhere a foliage plant or blossom is wanted, or trained to ramble over fence, trellis or arch, embankment, walls or abutments, or entwined about posts, trees or pillars.

Suggestions of Rose Culture. Plant only in a sunny position in soil free of all tree roots and protected if possible from severe weather.

Soil. Roses like a fertile, well drained soil and if one will prepare a bed especially well, he will be rewarded in wealth of bloom and vigor of plant. An ideal top-soil would be sod from a pasture mixed with well-rotted cow manure on a clay sub-soil.

Pruning. In planting, prune them back to three or four good buds, as they will grow off much better. The everblooming roses should be shortened back each year about one-half the previous season's growth. The ramblers may be pruned by taking out the older canes after they are through blooming, leaving only the younger canes, or by removing the flower spikes from the old canes. Budded roses should be planted deeper to cover the offset or crook just above the soil mark on the plant. Our plants are mostly own-root and field-grown and not the small pot roses usually offered.

Winter protection in the way of soil mounded up several inches about the plant, straw, manure, leaves or litter, especially about the tender varieties repays in flowers the extra trouble.

Enemies. While healthy and vigorous plants are not especially susceptible to disease or pests some pests will appear. For the leaf-eating insects, chafer, slugs and beetles, use arsenate of lead. For aphid or leaf hopper use kerosene emulsion or if diseases, leaf spot or mildew, use bordeaux mixture. Potassium sulphide, one ounce to 3 gallons of water controls mildew better than anything else.

The list we offer is not a large one but contains the "cream" of the ones that do well here. The Hybrid Teas are the everblooming types, a little tenderer but bloom over the entire season. Hybrid Perpetuals bloom profusely in June, then follows a scattering of blossom until frost.

White Roses

Clothilde Soupert. A bedding rose of merit. Blooms exceptionally well all through the summer. Its small white blossoms with pink outer petals makes it unusually attractive.

Druschki (Snow Queen or White American Beauty). H. P. This is a wonderful rose, in bud or full blossom. Owing to its vigorous habit of growth, it produces great masses of large pure white flowers in June, and regularly during the summer. Perhaps the best white in existence today.

Sir Thomas Lipton. This is a pure Rugosa rose, both in bloom and foliage and is therefore hardy everywhere. Flowers perfectly double and plant vigorous.

White Cochet. H. T. This is the best of its kind. The plant is healthy and will produce, in congenial surroundings, a great profusion of flowers. In bud or when full blown it is very fine. Color white with outer petals slightly tinged with pink. You make no mistake in planting it.

Red Roses

Eugene Marlet. H. P. This rose promises to succeed here better than any of its color. Teplitz is a great rose but too tender, but in this we found a hardy perpetual variety that blooms profusely all through the season. Blossoms large and a bright pleasing red, changing to crimson when fully developed.

General Jacqueminot. H. T. Affectionately called "General Jack" and truly a veteran of many years. It is known and wanted by everyone and notwithstanding the many new varieties this grand old brilliant scarlet, crimson rose finds a place in every rose bed. Its rugged growth, free flowering ways has made it deservedly popular. Does well everywhere a rose will grow.

Pink Roses

Conrad Meyer. Another rose of the Rugosa type. Makes a sturdy bush 3 to 5 feet with glossy green foliage and flowers in large clusters. In color it is one of those silvery pink varieties, beautiful in bud or full flower, followed by bright seed pods. Has received numerous medal awards.

Hermosa. This little bedding rose has won its way into the hearts of every rose lover. It is an everbloomer in every sense of the word, if the weak wood is removed and pruned annually. In color a most pleasing pink blooming all over the bush, making a mass of blossom.

Mrs. B. R. Cant. H. T. This is the freest blooming rose we offer, especially is it true in late summer and early fall. The bush is vigorous, free from disease. The pointed buds open into beautiful double flowers. A very dark pink fading into a most pleasing shade that everyone loves. We prize this variety highly and recommend it on its merits.

Paul Neyron. H. P. No doubt of it being the most popular hardy perpetual grown. Because of its vigor of bush and pleasing color, large size and comparative freedom of thorns there is an unprecedented demand for it always. It is a clear rose pink, sometimes called pink American Beauty, which it resembles much in form and color.

Pink Cochet. H. P. This we believe to be the best one of the pink roses today. Strong of bush, and a great producer of exquisite buds and flowers. In color a deep pink, save outer petals which are silvery rose-pink. Blossoms very double. Plant it, it won't disappoint.

Climbing Roses

American Pillar. Flowers large and single; range from 2 to 3 inches in width. Brilliant carmine-rose with cream variations and yellow stamens at center; produced in immense clusters being very showy and attractive. Unquestionably one of the finest single climbing roses known. Strong, rapid growth, healthy foliage and a wealth of flowers.

General
Jacqueminot.

Climbing American Beauty. This is a wonderful new rose, resembling its namesake in character and size of bloom. In color it is a deep pink not so dark as the bush form. The plant is a moderate grower and the foliage is usually free of mildew.

Crimson Rambler. As this variety is so susceptible to mildew we have discontinued it. Excelsa is preferred, being similar in color and season; foliage glossy green.

Dorothy Perkins. This variety is decidedly the most popular climbing rose today. The plants are healthy, the foliage being small, smooth and dark green. It is a luxuriant grower and is easily trained over fence, veranda or trellis. A beautiful light pink, semi-fragrant and blooming in large clusters.

Dr. W. Van Fleet. This new rose has a great future. In flower and foliage it is all that could be expected of a climbing rose. Blossoms extra large, resembling the tender Hybrid Tea roses in shape and size. Its strong stems are 12 to 18 inches long, making it valuable for cutting. In color a delicate flesh pink changing when full blown to a flesh white shade.

Excelsa (Red Dorothy Perkins). This variety is one of the best dark colored roses offered today. It resembles Dorothy Perkins very much in general characteristics of plant, except foliage is even more healthy. A radiant crimson in color, borne in great clusters from almost every bud. Outgrows other climbing roses, usually, and almost immune from disease.

Gardenia. This is a Wichuraiana or memorial rose. These are of Japanese origin and in mild climates evergreen. The foliage is leathery texture, dark green and almost insect and disease proof. Very desirable for covering graves, rock walls or stumps. Color in bud a pleasing bright yellow, opening double cream-color.

Silver Moon. Another new rose that has made a name for itself; large foliage of glossy dark green, perfectly healthy and a good grower. Flowers cup-shaped and largest of all the climbers. Semi-double and pure white with a cluster of beautiful yellow stamens in center.

Mrs. B. R. Cant Rose.

PRICER—65c EACH; \$6.00 PER 10.

1, Arbor-Vitae. 2, White Birch. 3, Scotch Pine. 4, White Spruce. 5, Norway Spruce. 6, Irish Juniper. 7, American Holly. 8, White Pine.

Evergreens

Here we have a group of plants that embrace a wide variety in character, habitat and color—greens of every shade and hue, charmingly contrasted with blue, gold or gray. They are a symbol of the never dying, able to adapt themselves to all types of soil and always clamouring for fresh air. In groups, for screening, shelter and hedges or as specimens, they are advantageously used. In the summer they are attractive but in the bleak, dreary days of winter how they liven the lawn under the weight of snow and sleet, their great drooping boughs of green seem to always cheer. Evergreens have no rival. Out on the lawn the larger growing Spruce, Hemlock, Pines and Junipers arranged in groups with lower growing and finer-foliaged plants surrounding them, prove the most attractive planting on larger lawns. The smaller premises too have places for them, as a background, screen or specimen, these taller plants prove serviceable. Then for a planting along the foundation walls they lend themselves to great advantage. They are expensive because of limited supply but may be made permanent with extra care in planting and caretaking afterwards, making the investment worth while. Our plants are dug with balls of soil and securely burlapped to insure perfect transplanting. The soil should be tramped well around the balls in replanting, removing the burlap. Broad-leaved evergreens without soil should have their roots dipped in thin mud before planting and all leaves clipped off. Prices quoted include balling and burlapping as no extra charge is now made for same.

All evergreens are inclined to grow "open" and where compact specimens are wanted (and this is especially true of evergreens used along foundation walls), shearing should be done occasionally. In May or June just as or after the new growth has shown, go over the whole tree with an ordinary hedge shear, clipping in the terminals. This causes the inside branches to develop and also new buds are formed where the cut is made. Thus a number of new branches are formed that hide the unsightly interior of open trees.

Abies - The Firs

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

Nordmann's Fir (*A. Nordmanniana*). Thick, dense, pyramidal tree of fine form; needles broad, dark green and lustrous. Silvery underneath.

	Each
5-6 feet	\$4.00
4-5 feet	3.50
3-4 feet	3.00
2-3 feet	2.50

Douglas Fir (*A. Douglasii*). A cone-shaped tree of very light bluish green foliage, even lighter on under side. Very desirable.

	Each
5-6 feet	\$4.00
4-5 feet	3.00
3-4 feet	2.00
2-3 feet	1.75

Buxus - Boxwood

This has become rather scarce since importation from Europe has been stopped. For formal planting, hedges, vases or boxes it has no equal. The foliage is always a shining dark green, and when given plenty of fertility and moisture thrives wonderfully well.

	Each
18 in. sheared plants	\$2.25
2 ft. sheared plants	3.25

This sketch shows excellent arrangement for a base planting—note the effective use of the pyramidal type trees in the corners and in the nooks, breaking the bare walls, and symmetrical pillars. While under the windows, plants of lower growth are used, all edged with globe and spreading varieties. Straight lines are avoided too, the graceful curves of the bed add additional charm to the grouping.

In similar arrangement numbers 1 and 2 should be tall or pyramidal; 3, 4, 5, 7, and 8, erect or semi-erect; while 9, 10, 11, and 12 are globe or spreading varieties. Similar effect can be obtained with deciduous shrubs as long as the general arrangement of plants is followed.

Juniperus - Junipers or Cedars

This family embraces many different forms and characters. They are pyramidal, erect and spreading; foliage varying in color from light to dark green, to gold and blue. They possess the vigor to establish themselves in any type of soil and will thrive in clay, stony and poorer soils where some evergreens may fail. Seem to withstand the soot and dust of our cities better than the general evergreen family. They make a sparse root system, requiring extra care in planting and until established. The needles are short and slightly prickly.

Greek Juniper (*J. Excelsa Stricta*). A dwarf pyramidal form, very compact, foliage bluish green. Each 2 feet\$2.50

Irish Juniper (*J. Hibernica*). A slender, columnar form with glaucous green foliage. Used largely in formal work or in contrast with habit and color plantings. Needs. no shearing.

Globe Type of Arbor-Vitae.

	Each		Each
5-6 feet	\$4.00	3-4 feet	\$2.50
4-5 feet	3.00	2-3 feet	2.00

Pfitzer's Juniper (*J. Pfitzeriana*). Of the spreading types, this is perhaps the most popular. Foliage a grayish green, slightly drooping and branches are horizontally spreading.

	Each
2½-3 feet	\$4.00
2-2½ feet	3.50
1½-2 feet	2.50

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

	Each
2-2½ feet	\$3.50
1½-2 feet	2.50

Blue Juniper (*J. glauca*). This is one of the best trees offered today. It grows pyramidal but has graceful spreading branches if left untrimmed. When sheared, a perfect column may be had. In color a light blue and a distinct contrast from any other of this group.

	Each
4-5 feet	\$6.00
3-4 feet	5.00

Picea - Spruce

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

Norway Spruce.

Norway Spruce (*P. excelsa*). A hedge of this variety will make an impenetrable barrier to trespassing, a wonderful enclosure for a lawn or garden, a windbreak for the residence, a fire protection from dangerous out-buildings, or planted on the lawn as specimens, or more especially in groups will prove most satisfactory. The tree is easy to transplant, grows rapidly and hasn't a fault. We offer this year some exceptionally well-shaped specimens—shipped with soil attached.

7-8 feet	\$6.00
6-7 feet	 5.00
5-6 feet	 4.00
4-5 feet	 3.00
3-4 feet	 2.50

Inverted Spruce (*P. excelsa inverta*). This is unusual because of inverted character of its branches. This contorted or weeping character adds variety to any planting.

	Each
3-4 feet	\$4.00

White Spruce (*P. alba*). A very hardy evergreen, with deep green foliage, similar to Norway Spruce.

	Each
3-4 feet	\$3.50
2-3 feet	 2.00
1½-2 feet	 1.50

Koster's Blue Spruce (*P. pungens Kosteriana*). A striking blue color, noticeable as far as can be seen. It may be used as a specimen or in group with excellent effect. Very popular and deservedly so.

	Each
2-3 feet	\$6.00
3-4 feet	 7.50

Colorado Blue Spruce (*P. pungens glauca*). A beautiful silvery blue tree, not as light in color but more symmetrical than Koster's Blue Spruce.

	Each
3-4 feet	\$5.00
2-3 feet	 4.00

Red Spruce. This has very dark green foliage, very symmetrical and makes a tree of small proportion. An extra good variety.

	Each
3-4 feet	\$3.00
2-3 feet	 2.50

Pines - Pinus

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

Mugho Pine (*P. Mugho*). This is an excellent dwarf pine, being globe shaped and erect branching. It is very attractive especially in spring when the new growth which seem like miniature candles completely covers the bush.

	Each
12-15 inches	\$2.50
18-24 inches	 3.50

Austrian Pine (*P. Austriaca*). A tall, massive, spreading tree, plumed with long, stiff, dark green needles. Useful for grouping or as a specimen.

	Each
5-6 feet	\$3.50
4-5 feet	 3.00
3-4 feet	 2.00

Red Pine (*P. resinosa*). Resembles the Austrian, except it is more compact and needles are shorter and reddish cone. Quick grower and will do well on high or low ground.

	Each
5-6 feet	\$4.00
4-5 feet	 3.50

Scotch Pine (*P. Sylvestris*). This is one of the best pines offered. Very quick to re-establish itself, grows rapidly and has ability to grow very luxuriantly on high and dry ground. Its needles are shorter than either White or Austrian Pine, in habit more compact, and foliage dark green. Where quick effect is wanted this variety will prove as satisfactory as any evergreen.

	Each
5-6 feet	\$4.00
4-5 feet	 3.00

White Pine (*P. Strobus*). This is perhaps the best of the Pine family. It is rapid in growth, reaches a great height and is at home in any soil. Its needles are long and droop gracefully, in color a beautiful silvery or light green. It transplants very kindly and we recommend it highly. With Norway Spruce, which is much darker in color of foliage, makes an excellent combination for grouping where large trees are wanted.

	Each
5-6 feet	\$5.00
4-5 feet	 4.00
3-4 feet	 3.00

Retinispora - Japan Cypress

This group contains many interesting plants. In foliage, grace, beauty and adaptability they are truly attractive. They develop into small trees, never growing as large as Pines or Spruce. The foliage is most attractive, especially when sheared, as then it develops its true color and with its lacy and graceful habit, makes it, whether in specimen or group planting, a much sought for plant.

Thread Branched Cypress (*R. filifera*). Drooping string-like branches of dark green.

	Each
2-2½ feet	\$3.00

Pea-fruited Cypress (*R. pisifera*). Cone-shaped, foliage fine cut and rather drooping at tips.

	Each
One of the best.	
3-4 feet	\$4.00
2-3 feet	 3.00

Plumed Cypress (*R. plumosa*). This is one of the best cone varieties. Foliage a grayish green, very finely cut and has a feathery appearance. Should be sheared during June or July.

	Each
4-5 feet	\$5.00
3-4 feet	 4.00
2-3 feet	 3.00

Veitch's Cypress (*R. squarrosa Veitchii*). This is one of the best. Foliage a distinct bluish green, terminals silver. Very compact and rather semi-globe in habit of growth.

	Each
3-4 feet	\$4.00
2-3 feet	 3.00

Taxus - Yew

This is a newer group of evergreens that no doubt will soon prove a most valuable addition to the family of dwarf evergreens. Stands shearing or clipping well, grows in shady or exposed locations, and with its thick, short, dark green needles makes a noticeable plant wherever used.

	Each
1½-2 feet	\$2.50
2-3 feet	 3.50

Thuya - Arbor-Vitae

This group contains the more popular forms of lower-growing evergreens. Pyramidal or globe shapes may be had and are popular for foundations, groups, hedges, cemeteries, vases, window boxes, in fact for every purpose an evergreen is wanted. They do well wherever planted, and the flat or "pressed" foliage is most attractive. Should be sheared occasionally so as to develop new growth to cover the inside branches that become bare in a few years if left untrimmed.

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

Each	
1½ feet	\$2.50
2	3.50

Hovey's Arbor-Vitae (*T. Hoveyi*). Similar to above, of more rapid growth and lighter green. One of the best globular evergreens.

Each	
1½ feet	\$2.50
2	3.00

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

Each	
3-4 feet	\$2.50
2-3 feet	2.00

Oriental Arbor-Vitae (*T. Orientalis*). A striking color, pyramidal in shape and different from any of the others of this group.

Each	
4-1½ feet	\$4.00
3-4 feet	3.50
2-3 feet	2.50

Siberian Arbor-Vitae (*T. Wareana*). A very dark green the entire year and for this reason most popular.

Each	
1½-2 feet	\$2.00
2-2½ feet	2.50

Pyramidal Arbor-Vitae (*T. Pyramidalis*). This is without doubt one of the very best cone-shaped evergreens known. Color a deep rich green, easy to transplant and will grow 8-10 feet.

Each	
4-5 feet	\$4.50
3-4 feet	3.00
2-3 feet	2.50

Tom Thumb Arbor-Vitae. This is an exceptionally dwarf growing variety; globe shaped and seldom reaching 2 feet in height. It is very bright green in summer, changing to bronze in winter, being decidedly different from other varieties. Foliage very finely cut and lacy.

1-1½ feet	\$2.50
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Tsuga - Hemlock

No better tree known today and never enough grown to meet the demand. It grows rapidly in the open lawn and in confined places adapts itself admirably to all conditions. It may be sheared into compact specimen or left to develop its great drooping branches, making it valuable wherever a large or small tree is wanted. Prefers moist, though will grow in any soil.

Each	
4- 5 feet	\$5.00
3- 4 feet	4.00
2½-3 feet	3.00
2-2½ feet	2.50

Holly - Ilex

Ilex Opaca (American Holly). A well known native evergreen plant, with large glossy leaves. Red berries appear frequently on old specimens. We have a fine stock in medium sized plants. We advise clipping the leaves at planting time, as it is often difficult to establish.

Each	
3- 4 feet	\$3.00
2 -3 feet	2.00
1½-2 feet	1.50

Spraying

Some persons have been disappointed in their results from spraying because they used the wrong material, failed to apply thoroughly, or did not apply at the right time. Therefore, to get results study the character of insects and pests and then the work can be done intelligently and profitably. No single application nor single spray material will control every trouble.

There are two general divisions of plant enemies, i. e., insect and fungus.

INSECTS.—For convenience let us divide the insects in two groups: Chewing and sucking.

Chewing insects are those like the potato beetle or codling moth that eat part of the tissues of plants. This class is easily controlled by the spreading of some poison like Paris Green or Arsenate of Lead within their feeding range provided it is done in time. Thorough application will soon control this class.

Sucking insects. This group have no jaws but proboscis or beaks that they sink into the tissues and suck out the sap. Scale or Aphis are familiar examples. Because of this character of feeding they are not susceptible to poison spread on the foliage so they must be killed with a contact-poison. These are either irritants or miscible oil combinations, so that when they are hit with a spray material death will result. Because every insect must be touched to insure results, thoroughness is absolutely necessary in bad infestation.

DISEASES.—Fungus causes most of the plant diseases. It spreads by means of spores which are very small dust-like bodies that adhere to a congenial host plant and there develops its thread-like structures causing a diseased condition. They are easily spread from plant to plant by insects, birds, wind and water. Because this fungus growth develops at the expense of the host plant and leaves it in a diseased condition, prevention and cure are equally important. In spraying commence before the disease has advanced and spray thoroughly as spores will germinate rapidly on favorable host plants and in moist seasons.

SOME BEST SPRAYING REMEDIES.—Arsenate of Lead. Is recommended for all chewing insects. It mixes readily, sticks to the foliage better, remains in suspension longer, not injurious to plants, is not an irritant,

thus easy to apply. Use 2 to 5 pounds per 50 gallons of water, depending on the virility of the insect. First mix in a small quantity of water, strain or at least see that it is free of lumps and then mix thoroughly. Keep agitated when applying.

Bait for Cut-Worm or Grass-Hoppers: Bran, 4 quarts; Arsenic or Paris Green, 3 oz.; Cheap Syrup, 1 pint; Water, 1 gallon. Mix thoroughly and scatter about infested areas. Do not put it where poultry, etc., will reach it.

Kerosene Emulsion: Hard soap, ¼ pound; Hot Water, ½ gallon; Kerosene, 1 gallon. Slice soap and dissolve in hot water. Remove it from fire and pour in kerosene while still hot. Churn and pump into itself until a creamy emulsion is formed, which should mix with cold water. For all sucking insects dilute 8 to 15 times.

Bordeaux Mixture: 4-4-50 Mixture; Copper Sulphate, 4 pounds; Fresh Stone Lime, 4 pounds; Water, 50 gallons. Dissolve copper sulphate in hot water using a wooden vessel. Slake lime in another receptacle. Slowly pour these into the water, stirring until an immaculate blue mixture results. It is ready for immediate use. Fresh mixtures give best results. Note Peach and Japan Plums foliage is tender and two pounds more lime is suggested. For all fungus, i. e., rots, moulds, mildews, etc., this is effective.

Lime Sulphur Solution.—This is the commercial form and should not be confused with self-boiled lime sulphur. Standard commercial Lime Sulphur should test 32 degrees Baume by hydrometer.

Self Boiled Lime Sulphur.—8-8-50. Slake 8 lbs. of the best stone or lump lime in a barrel or tight box. Use hot water when available, but only enough to start slaking.

When slaking begins add 8 lbs. of flowers of sulphur (previously mixed to a paste with a small quantity of water) to the slaking lime, stirring constantly. Continue to add water in small quantities, sufficient to keep the lime in a soft, pasty condition.

As soon as the slaking is over (usually within 15 minutes) it is important to add at once sufficient cold water to cool the mixture and stop the cooking of the sulphur. Stir vigorously and strain into spray barrel or tank, adding water to make 50 gals. of spray material.

Orchardist Spraying Calendar

Recommended By Kentucky Experiment Station

Spraying Apples

Spray for	Time to Apply	What to Use
1. San Jose scale.	Dormant season; best time, just before leaf buds open.	Standard lime-sulphur, liquid, 1 gal. to 8 gals. water. Scalecide
2. Apple scab. Apple aphid.	Just before blossoms open; when showing pink color.	Lime-sulphur $1\frac{1}{4}$ gals. to 50 gals. water. Nicotine sulphate $\frac{1}{2}$ pint added to above if aphid is present.
3. Apple worm. (Codling moth.) Apple scab.	When blossoms have fallen.	Lime-sulphur $1\frac{1}{4}$ gals. to 50 gals. water and $1\frac{1}{4}$ lbs. arsenate of lead powder.
4. Apple blotch. apple scab. Codling moth (late hatched.)	Two weeks after blossoms fall.	Bordeaux mixture 3-4-50, $1\frac{1}{4}$ lbs. arsenate of lead powder.
5. Blotch, apple scab, Rots.	Two weeks after Spray No. 4.	Bordeaux mixture alone.
6. Apple blotch, rots, Codling moth may be present.	Two weeks after Spray No. 5. about June 15.	Bordeaux mixture 3-4-50, $1\frac{1}{4}$ lbs. arsenate of lead.
7. Codling moth. Apple blotch, rots.	About July 15.	Bordeaux mixture 3-4-50, $1\frac{1}{4}$ lbs. arsenate of lead.

Spraying Peaches and Plums

Spray for	Time to Apply	What to Use
1. San Jose scale. Leaf curl.	Dormant season.	Commercial lime-sulphur, 1 gal. to 8 gals. water. Scalecide
2. Curculio.	After blossoms fall.	1 lb. arsenate of lead powder, 3 lbs. lime, 50 gals. water.
3. Peach scab. Brown rot, Curculio.	$2\frac{1}{2}$ to 3 weeks after Spray No. 2.	Self-boiled lime-sulphur 8-8-50, 1 lb. arsenate of lead powder.
4. Brown rot. Scab.	3 to 4 weeks after Spray No. 3.	Self-boiled lime-sulphur 8-8-50.
5. Brown rot. Scab.	About 4 weeks before fruit ripens.	Self-boiled lime-sulphur 8-8-50.

A Few Prevalent Enemies and Suggestive Remedies

	DESCRIPTION	VICTIMS	REMEDIES
Anthraxnose	Affects canes, Produces sunken spots and lines, purplish border, and gray center.	Grapes and brambles.	Bordeaux Mixture, 5-5-50. Apply when dormant. Two applications usually necessary.
Aphis, Plant Lice, and Similar Soft-bodied Insects	Sucking insect on the young growth. Usually on terminal wood.	Fruits and ornamental plants.	Kerosene Emulsion, diluted 8-12 parts, applied at first appearance. Repeat if necessary.
Black Knot	Small wart or knots on the branches of some trees.	Cherry and Plum.	Cut and burn, disinfecting instruments. Copper sulphate 1 lb. in 25 gals. water applied when dormant will help control.
Blight	Causes branches to wither and die, gradually eating into the trunk of tree if not controlled.	Apple, Pear, some ornamentals.	Bordeaux, 5-5-50. Scalecide is better control spray. Apply dormant.
Blotch Scab	Causes brown spots on leaf and discolored and misshapen fruits.	Apple, Pear, Peach.	Bordeaux, 4-4-50. Apply first as petals fall. Repeat in two or three weeks.
Canker Worm	"Measuring worm." Inch or longer, ravenous feeders on foliage.	Principally fruit trees.	Arsenate of Lead, 2-4 lbs. to 50 gals. of water.
Curculio—Codling Moth	Causes wormy fruit. Eggs laid under the skin of a small fruit or at calyx end.	All fruits.	Arsenate of Lead, 2 lbs. per 50 gals. water after petals have fallen.
Curant Worm	Yellow usually with black spots. Destroys foliage rapidly.	Currants and Gooseberries.	Arsenate of Lead 3 lbs. per 50 gals. water. Spray thoroughly and repeat if necessary.
Fall Web-Worm	Another chewing insect appearing in late summer and fall.	Fruit trees.	Arsenate of Lead, 3-5 lbs. per 50 gals. water.
Flea Beetle	Small shiny beetle, steel blue or greenish purple. Eats young shoots of grapes.	Grapes.	Arsenate of Lead, 3-5 lbs. per 50 gals. water. Apply when buds are breaking. Repeat in 10 days.
Leaf Curl	Causes leaves to curl up and become distorted. Very conspicuous.	Peach and Plum.	Bordeaux Mixture or Lime Sulphur. Standard strength when trees are dormant.
Leaf Spot	Small, roundish spots appearing on foliage causing injury.	Fruit trees.	Bordeaux Mixture, 4-4-50. Repeat in two weeks.
Mildew	Dust-like. Causes discoloration of foliage, prevents its proper function and consequential injury to plants.	Fruit and ornamental plants.	Bordeaux as directed. Potassium Sulphide 3 oz. to 10 gals. water is best control spray.
Rose Chafer	Light brown beetle that eats foliage and flower.	Roses.	Arsenate of Lead, 4 lbs. to 50 gals. water.
Rots	Causes decay in fruits.	All fruits.	Bordeaux Mixture, 5-5-50. Apply several times if disease is persistent.
Scale	Size of pin-head, usually grayish color, sucking vitality from affected areas.	Fruit and some ornamental trees.	Controlled by dormant spraying with commercial Lime Sulphur or Scalecide. By all means spray thoroughly.

INDEX

	Page
Abelia	28
Abies	42
Acer	22
Achillea	36
Adam's Needle	39
Aesculus	19
Almond, Flowering	28
Althea	30
Amelanchier	28
Ampelopsis	35
Amygdalus	28
Anchusa	36
Apples	5, 6
Apple, Flowering	28
Aquilegia	36
Aralia	28
Arbor-Vitae	45, 46
Arundo	38
Ash	18
Ashberry	31
Asparagus	14
Asters	37
Barberry	28-34
Basswood	20
Beech	18
Bellflower, Japanese	38
Berberis	28
Bergamot	38
Betula	18
Bignonia	35
Birch	18
Bittersweet	35
Blackberries	13
Blanket Flower	37
Boxwood	42
Buck Bush	33
Buddleia	28
Butterfly Bush	28
Buxus	42
Calycanthus	29
Cambridge Scarlet	38
Catalpa	19
Cedars	44
Celtis	30
Cercis	23
Cherries	9
Chestnut, Horse	19
Chionanthus	29
Chrysanthemums	37
Clematis	35
Columbine	36
Coralberry	33
Corchorus	31
Coreopsis	37
Cornus	19, 29
Cotoneaster	29
Crab Apples	6
Crab, Flowering	28
Crataegus	29
Currants	11
Cydonia	31
Cypress	19
Cypress, Japanese	45
Daisies, Michaelmas	37
Daisy, Painted	38
Delphiniums	37
Deutzia	30
Diervilla	29
Dogwood	19, 29
Dolichos	35
Elder	32
Elm	19
Eulalia	38
Euonymus	30, 35
Evergreens	42, 46
Fagus	18
False Dragon Head	38

	Page
Fir	42
Forsythia	30
Fraxinus	18
Fruit Department	4-14
Gaillardia	37
Ginkgo	21
Golden Bell	39
Golden Glow	39
Gooseberries	11
Grapes	12
Grasses, Hardy	38
Gum	19
Gymnocladus	20
Hackberry	20
Halesia	30
Hawthorn	29
Hedera	35
Hedge Plants	34
Helianthus	38
Hemlock	46
Hibiscus	30, 38
High Bush Cranberry	33
Holly	46
Hollyhocks	37
Honeysuckle	35
Horse Chestnut	19
Horseradish	14
Hydrangea	30
Hypericum	31
Ilex	46
Indian Currant	33
Iris	38
Ivy	35
Judas Tree	23
Junipers	44
Juniperus	44
Kentucky Coffee Tree	20
Kerria	31
Koelreuteria	20
Kudzu Vine	35
Landscaping	15-16
Larch	21
Larix	21
Ligustrum	31
Lilac	33
Linden	20
Liquidambar	19
Liriodendron	21
Lonicea	35
Magnolia	21, 31
Mahonia	31
Maiden Hair Tree	21
Mallow	38
Maples	22
Meadow Sweet	32
Michaelmas Daisy	37
Milfoil	36
Mock Orange	31
Monarda	38
Morus	23
Mulberry	23
Nettle Tree	20
Oak	23
Osiers	29
Peaches	8
Pears	7
Pecans	23
Peonies	39
Perennials	36-39
Persimmons	10
Philadelphia	31
Phlox	38
Physostegia	38
Picea	44-45

	Page
Pine	45
Pinus	45
Plane Tree	23
Platanus	23
Platyedon	38
Plums	10
Poplar	23
Poppies	38
Populus	23
Potatoes, Seed	14
Privet	31, 34
Pyrrethrum	38
Pyrus	28, 31
Quercus	23
Quince	10
Raspberries	13
Red Bud	23
Red Hot Poker	39
Rettinispora	45
Rhodotypos	31
Rhubarb	14
Rhus	31
Roses	40-41
Rose, Japanese	31
Rosa Rugosa	31
Rose of Sharon	30
Rudbeckia	39
Sage	14
Salisburia	21
Salix	23
Sambucus	32
Service Berry	28
Shade Bush	28
Shasta Daisies	39
Shrubs, Deciduous	26-33
Silver Bell	30
Snowball	33
Snowberry	33
Spindle Tree	30
Spiraea	32
Spraying	46-47
Spruce	44-45
St. John's Wort	31
Strawberries	11
Sumac	31
Sunflower	38
Sweet Shrub	29
Sweet William	39
Sycamore	23
Symphoricarpos	33
Syringa	33
Tamarix	33
Taxodium	19
Taxus	45
Thuya	45-46
Tilia	20
Trees, Deciduous	17-23
Tritoma	39
Trumpet Vine	35
Tsuga	46
Tulip Tree	21
Ulmus	19
Varnish Tree	20
Viburnum	33
Vines	35
Virginia Creeper	35
Wayfaring Tree	33
Weigela	29
White Fringe	29
Willow	23
Wistaria	35
Xanthorrhiza	33
Yarrow	36
Yew	45
Yucca	39

Hydrangea Paniculata Grandiflora.

An effect obtained by the use of Boston Ivy.

Showing Norway Spruce Hedge trimmed to six feet high and forty foot Norway Spruce in the background. The Norway Spruce is a wonderful tree wherever planted.

OUR CATALOG offers value for value, satisfaction and service. If you need assistance in making any selection of nursery stock for your orchard or grounds, or after it has been established any information we can give is wanted, you are at liberty to write us. Eighty years of nursery practice, rich in experience and liberal in patronage, enables us to offer this intelligent service in partial appreciation.

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