Historic, archived document

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

FRIENDS and PATRONS—

THE very first thing we want you to see when you open this catalog is a word of appreciation. You know how difficult it is to say even thank you in a personal and sincere way when it is confined to writing. We wish you knew how very much your patronage has meant to us, how greatly we appreciate it, and how sincere we are in our efforts to continue this pleasant relationship. We thank you for your patronage and good will, extending as it has in many cases over years of business friendship, and may our succeeding relations be again mutually pleasant. Such is our personal message to you.

A word about this catalog. From the comments received last year we are publishing again a book of the same general character. If you find there are problems about your plants or grounds that we can help you solve, do not hesitate to write us. We are at your service in all horticultural matters.

Yours very sincerely,

H. F. HILLENMEYER & SONS
HENRY CLAY AND THIS TREE

This Ginko or Maiden Hair Tree has seen much of the history of Lexington and the Blue Grass enacted. It was one of four trees given by Henry Clay to his friends shortly after the signing of the treaty of Ghent. They were given Mr. Clay by one of the Japanese diplomats with whom he had formed a friendship during his tenure in public office.

This tree was given Mr. Jas. O. Harrison, warm personal friend and later executor of Mr. Clay, and planted here on his lawn, along with several other trees not indigenous to this state. This property has since become that of the Good Samaritan Hospital. This old tree stands here today as fine a specimen as can be found in all America, stately and inspiring, happy in its congenial location, seemingly proud of its mission in life. It is a monument to the friendship of individuals and to the mutual love of tree enthusiasts of both continents.

To me there is always something fascinating about old trees. They have lived through such an interesting development of the times. They have lent their prestige, their beauty and utility in a beneficent and subservient way. I like to think of their great sheltering, shielding leafy arms spreading in protection, their comforting, cooling shading from the torrid noon day sun, and their beautiful foliage, "deeper than the greenest ivy and in its passing the scarlet of Kings and Queens and the purple of dignitaries may well blush." And how they form links in one's memoirs of life, for trees are like old friends, the stress of years, the strife of life time seem to make richer their noble character. And why not plant more of them? You know trees are one of the few things that are at their lowest valuation at time of planting for each succeeding year adds to their beauty and value. And, too, planted as memorials, or to commemorate some event, to recall or indicate some particular occurrence, like a birthday or the birth of a child or on any occasion they are interesting in their development and make living monuments, more inspiring than stone or metal.

This tree has lived nigh on to a hundred years now, and, excepting accident, another century will roll around to find it more beautiful and inspiring and a living memorial to friendships bonded through such an enduring gift.
LEXINGTON THE HEART OF THE BLUE GRASS

From the time of its naming, June 5th, 1775, it being the first city of the land to memorialize the first battle of the Revolution down to the present something interesting may be told of Lexington’s history and deeds of its citizens that interest and inspire.

One hundred and fifty years ago the red man roamed these hills and valleys. The adventurous white man and woman penetrated the wilderness coming from Virginia and the Carolinas to settle here, and their struggle was typical of the pioneer life that conquered a continent.

That they built here at Lexington on the dust of an ancient city is evidenced by stone sepulchres, catacombs, excavations of pottery and half burnt wood and curious earthen vessels and copper utensils. Perhaps that occupation was that of the Aztec. And today our Lexington is a fair city, with its schools and its great universities, with its temples of religion, with its marts and manufactures, its homes and business houses—all the result of the heroism and foresight of courageous men and women who have lived through this period of time.

To the Visitor—There are things that attract. Famed for its rolling pastures, fertile fields of staple crops, productive land, and blooded horses and live stock, the Blue Grass region is of interest to even the casual observer. Besides this scenic interest the city and surrounding country are full of places of considerable historical importance. For example, Ashland, the home of Henry Clay, attracts pilgrims from everywhere. His tomb may be seen in the Lexington Cemetery; as well as the home of Mary Todd, the wife of Abraham Lincoln; the home and equestrian statue of John Hunt Morgan, the great Confederate Raider; the monument of John C. Breckenridge, America’s youngest Vice-President; Transylvania College, first college west of the Alleghenies, established in 1787 and its first endowment fund finds the names of Washington, Jefferson and Burr. We have here the Kentucky State University with its several colleges. The Kentucky Trotting Track, one of the most famous in the country and the Kentucky Association, where race meetings were held as early as 1826. On Cheapside here was where the first school house in the state was built, the oldest medical library of America is located in Transylvania college. The rails and stone sills of the pioneer railroad of the west are to be seen on State University campus and the house where Jefferson Davis lived while a student at Transylvania College, is still to be seen. Then there are Sayre and Hamilton Colleges, the old Eastern Hospital, Bryan Station Springs world famous stock farms and dozens of other points.

And while we note these places because of their historical interest, as well as longevity, we might mention, too, that the Hillenmeyer Nurseries have long been in the community and have done much towards the building up of the horticultural interests of Kentucky and a visit to this place might be interesting.

How to Reach Us—Come out Georgetown road one mile from city limits, passing a branch nursery here, turning on side road for a quarter mile to our office and warehouse. We are glad to have you inspect our place at any time.
OUR POLICIES AND SERVICE

Adjustments—Our chief aim is delivering to our customers—to you—of a full measure of satisfaction, and any errors made in filling orders will be promptly and cheerfully corrected.

It is on this foundation that we have built our business and solicit your patronage. The co-operation we ask of you in establishing satisfaction is that you advise us immediately should an examination of your shipment disclose an error. Delays often make satisfactory adjustments impossible.

We have but few misunderstandings and believe that any differences which might arise in your dealings with us can be amicably straightened out.

Agents—We always have served our customers direct without agents. No one is authorized to represent himself as such and we would appreciate having our patrons report anyone soliciting orders under such representation.

In selling direct, without the expense of agents’ commissions we are enabled to give our customers a better value of goods and greater satisfaction.

Replacements. Everything that is humanly possible is done to insure the receipt by our customers of live, healthy stock that will thrive and give fine results if properly cared for.

The digging of stock, that is cutting roots and moving the plants from one place to another has in it a certain amount of risk as does a surgical operation. Nursery stock is perishable in nature, for the plants we sell are living things. In the transplanting of them a few may die.

Our very reasonable prices are based on the cost of production and not on the probable percentage of failures in the operation of transplanting.

Ninety per cent of failures are due to causes which you will readily recognize are beyond our control, such as delay in transit, improper plant care after receiving, undue exposure during planting, improper setting, failure to prune, impoverished or unadapted soil, disease and injury with lack of subsequent care and attention. Not only do we carefully pack and ship healthy live stock but we instruct our customers as to the correct handling, planting and caring for the nursery stock they receive. Regardless of our many precautions a combination of the above circumstances may cause a tree to die altho it possessed vigor and vitality when shipped.

Every bit of thought and knowledge we possess goes into the growing of our plants for a period sometimes from two to fifteen years. It has cost us just as much to raise those that fail as it does those that grow. In view of our nominal prices and the fact that only live healthy stock, properly prepared for shipment, leave our nursery, replacements without charge are not possible.

Guarantee—All stock sent out by us must not only be healthy but true to labeled name and as described in this catalogue.

Errors, of course, sometimes occur. We pride ourselves on conducting our business on the highest ethical lines. We deplore misrepresentation and carelessness alike, and the fact that our business is singularly free of adjustments speaks for the consistently satisfying service we render our customers.

Should by any chance a plant be found untrue to name we will gladly replace with the genuine or refund the purchase price. Beyond this we can assume no responsibility.

Substitution—Occasionally we find ourselves out of a certain variety. In such cases we always send the nearest match in color and season unless you instruct us when placing the order to make no substitution.

On many orders for fruits or ornamentals our intimate knowledge of varieties, soils and climate enable us to make changes which are profitable to our customers. We make no effort, however, to better a selection of varieties unless our customer gives us specific permission to do so.

Terms—Unlike most types of business the average turnover of our stock is four and a half years. In other words, we are that length of time in getting our money back even when the goods are sold on a cash basis. For this reason our terms are cash with order. Some folks are sensitive about C. O. D. shipments. If you cannot purchase except on a credit basis, please write and make such arrangements. Credit charges usually carry a 10% advance over our regular prices. This covers the added expense of a credit transaction. We like to have orders placed with us on a basis of mutual understanding and confidence and will do our utmost to thoroughly please you.
WHEN TO

- - PLANT

When is the best time to plant? This question is asked more than any other. There is no best time. Several conditions make it impossible to name either Spring or Fall. The best time to plant hardy things is when your soil is in best condition to receive the plants. This preparation is the most necessary. The temperature of the ground changes little fall or spring after you get under the surface a few inches. All things being equal fall has advantages of spring. The cut roots heal over during the winter, the rains usually firm the soil about the plant and with the first breath of spring air, your tree is on your grounds ready to start. But the spring planter doesn’t have to risk winter injury on the tender plants, he has the long winter evenings to plan his requirements and the soil is usually a little easier to dig and prepare.

Shallow rooted things, like strawberries, should not be planted until spring. They “spew” out of the ground over winter. Other plants like perennials that haven’t deep or spreading roots to anchor them, sometimes do the same thing. Other nurserymen will give opposite advice, but with the experience of the past winter when even established plants were uplifted, we certainly cannot advise the late planting of either perennial or strawberries. The woody plants have strong and spreading root systems that are buried below the alternate thawings and freezings of our winter and this particular phase does not concern them.

BRIEF PLANTING INSTRUCTIONS

We send out planting instructions with each order. Some cultural hints are given under each heading throughout the catalog. Briefly this is what you should do:

On arrival of trees, place in a protected place, keeping moist if held for a day only, else bury roots in ground at once.

Pruning is necessary. General rule is to cut off one-half to two-thirds the length of the lateral branches. This balances loss of root system necessary in digging the tree. Remove all label wires.

Plant carefully. Dig ample holes to take roots without crowding. Plant not more than an inch or two deeper than they formerly stood. Work fine soil into the roots, be sure there are no air pockets and tamp earth solid to insure contact with every root. Water, if possible, before applying the top three inches.

Mulching or cultivation is necessary if good growth is expected. Both conserve the moisture, which is very essential.

Wrapping of the bodies up to where the branches start with burlap to protect the trunks from the blistering sun is advised.

Watering. Sprinkling and spraying are of little value during times of drought. Remember the roots of most plants are buried 8 to 18 inches in the soil and it takes a good soaking to reach them. Let the hose run slowly for an hour or so—it pays.
LET US SOLVE YOUR LANDSCAPE PROBLEMS

We are constantly being called on for plans and suggestions for the beautification of home grounds. We are equipped to render this service. Accurate dimensions of the property, home and other buildings, the location of the roads and walks and the exposure of the house are very necessary before we can plan intelligently. These simple requirements are omitted in half the plans we receive. The kind of planting—whether of evergreens or deciduous plants will make considerable difference in price. If you would mention the amount you wish to spend we can plan accordingly.

PLAN EARLY

One other suggestion and that is don't wait until you are ready to plant. Our business is all crowded into a few weeks of fall and spring and we must move our products hurriedly. We like to give these plans personal attention. If you wait until the last minute we won't be able to render our best service. Try to send in your plan early and we can make a lay-out for you with more thought.

THE SECRETS OF SUCCESSFUL LANDSCAPE GARDENING

Start out with a definite object in view and plan accordingly.

Locate your walks and roadways arranging them for service and beauty.

Avoid straight lines and sharp angles if possible. Graceful curves are more pleasing to the eye.

Avoid terraces and steep grades as longer slopes are more natural and easier to maintain.

Plan to leave the center of lawn unobstructed planting the borders with masses of shrubs and trees.

Remember in arranging your shade trees on the lawn, your idea should not be to play checkers with them but to "frame" the house and not hide it. Always leave the center open as it makes the approach more inviting.

Back ground or sky line is a feature not half appreciated. Given a proper setting a cottage will often be more attractive than a poorly planted mansion. Plant heavily behind and to the rear sides of your home if on a big lawn.

Avoid too much variety in mass planting. Alternating or "salt and pepper" arrangement is not nearly so effective as grouping plants of each kind.

Where space permits at least five plants of a single kind is suggested.

For front line or border planting especially, choose few varieties and plant more of them. The results will be more pleasing. Plant the taller things in the back of the border with the lower growing ones alternating and the border plants in curves or groups. Never expect to get mass effect by straight line planting.

For the foundation remember always—height in the corners, immediately in front of pillars and at the bare wall spaces. Under the windows low or medium plants only.

Curves in beds of shrubs make a great difference. If you aren't sure of making the right kind then get out the hose and lay out your beds with it. Mighty easy to do.

If the man of the house objects to that porch trellis or frame on which you have planned or a vine or rose because of the inconvenience of painting or spraying, tell him to put a hinge at the bottom and you can lay it down. Often this saves time and temper.

Lawn furniture—that is bird baths, seats, rose arches, sun dials, etc., if properly placed make the lawn much more attractive. These little touches help beautify.

—See Sketch Page 18
EVERGREENS
ARE IMPORTANT IN ANY PLANTING

GREEN of every shade and hue, charmingly contrasted with blue, gold and gray, their foliage is always pleasing. Pyramidal or erect, globular or spreading you can find forms for every fancy. For groups or screening, in shelter planting or hedges you have nothing quite to equal them. In summer they are attractive, in winter they offer a comforting note to the bleak landscape and under the weight of ice and snow their great drooping branches of green seem to cheer.

Out in the lawn, the larger growing Pines, Spruces and Hemlocks suggest a permanency and a grandeur that cannot be duplicated with other planting materials. For small premises there are appropriate varieties. As backgrounds, hedges and specimens you will find plants suitable for every use. In landscape work they simply have no rivals. They are so wonderful because of their beauty throughout the four seasons of the year.

Their most popular use of course is for doorstep or foundation planting. No home is now complete without something to break the bare walls or soften the harsh lines. The day of scarlet sage and cannas is past, persons demand something more permanent and more lasting than a few weeks of summer blossom and foliage. Evergreens fill every requirement. They are hardy, they are enduring and their beauty, permanent. Their habits of growth, their various forms and interesting foliage enables any one to choose, no matter how fastidious, varieties that will be pleasing in effect and congenial of location.

Planting suggestions—Before you dig your holes or loosen the burlap (as all evergreens should be handled with balls of soil intact) set them up in arrangement as planned and move them about, view them from different angles so as to get the very best effect. When planting, the burlap should be loos-
Pruning.—At planting time evergreens seldom need pruning. If well grown like ours they are shapely and when handled with balls of soil they should grow off without trouble. However in a year or so some varieties are inclined to grow “open”. Then shearing may be done with hedge tools, clipping the young growth, preferably not further than that made the previous season. This causes the inner branches to advance making a very close and compact plant, thus hiding the unsightly interior of open trees. Topping, too, may be done but please try and cut to a small branch that will again develop into a leader. Chopping the tops off flat often makes good trees resemble a sawed-off board or log. Important—Prune evergreens when they are growing — better just as the spring growth comes on and at least before it becomes hard in July.

Evergreens have three occasional enemies, not serious but harmful: Bagworm, a little insect that lives in a sack and eats the foliage. Red Spider, which makes your tree look rusty or brown. See spraying chart on page 47, for treatment. The other trouble is the dog. Tie up the pup, as canines and conifers don’t mix, or else plant something on the front row in protection.

THE ARBOR VITAE

ARBOR VITAE, AMERICAN, Thuja occidentalis. One of the most popular evergreens because of its caniness to transplant, growing kindly under adverse conditions and as a specimen or hedge plant it is very attractive. It is inclined to be conical in habit of growth and while it is not as green in color during the winter as some of the other varieties it is one of the most popular because of its many good qualities.

ARBOR VITAE, BERMAN GOLDEN, T. orientalis aurea nana. This is without doubt the showiest of all the Arbor Vitae family. The color is an unusually attractive bright green and is striking in appearance. Does especially well with us and should be in every planting.

ARBOR VITAE, GLOBE, T. occidentalis globosa. This usually develops into a perfect globe shape plant, the spread equalling the height. The foliage is light green and attractive. These are largely used for front line planting, as specimens in urns or vases as well as in formal work where symmetry is especially desired.

ARBOR VITAE, ORIENTAL or CHINESE, T. orientalis. This has the typical pressed foliage of the Arbor Vitae family, but is inclined to branch erect forming in “folds” about the stems of the plant. It is different from the other varieties in character of growth and appearance. It grows very rapidly and can be used where mass effect is wanted, as a specimen or in a hedge. It shears especially well and it is often necessary to prune it to make it real compact as it is inclined to grow open.

ARBOR VITAE, PYRAMIDAL, T. occidentalis pyramidalis. This is strikingly attractive, being perfectly pyramidal in shape, spreading very little at its base and retaining the shape without shearing. The color is deep rich green and like all Arbor Vitae is easy to transplant. For corners, in front of pillars, center or background of group plantings there is hardly an evergreen of the dwarf variety that is so popular.

ARBOR VITAE, SIBERIAN or WARE’S, T. occidentalis wareana. This is a small globe variety and its unusually dark green color makes it very useful. It is the darkest green of all the American Arbor Vitae. It can be sheared to a perfect globe though if left to develop naturally it is oblong.

ARBOR VITAE, ELLWANGER’S, T. occidentalis ellwangeriana. This has very fine cut foliage and does not exactly resemble the “pressed” leaves that characterize the other varieties. It is very compact growing and has a soft feathery appearance not found in other evergreens.

ARBOR VITAE, GOLDEN, T. occidentalis lutea. This has bright yellow foliage in the growing season and is especially fine where contrast in color is wanted. It is distinctly pyramidal in shape, being broad at the base.
HEMLOCK

HEMLOCK, Tsuga canadensis. We consider Hemlock the very best of all the evergreens. It grows rapidly in the open lawn, in confined places it adapts itself to all conditions and if kept sheared can be well used as a foundation plant. If left to develop naturally it has sweeping pendulous branches that are most graceful and when sheared it has a soft billowy appearance that cannot be duplicated with other evergreens. The foliage is always a very deep green and as it will grow in all exposures and under adverse circumstances it is more largely planted than any other evergreen. We have a saying here, “When in doubt, plant a Hemlock.”

BOXWOOD

BOXWOOD, Buxus sempervirens. Everyone is familiar with Boxwood and its good qualities. There is hardly a plant that can be used in quite so many positions. For edging, as specimens for urns, window boxes it is very useful. The foliage is always a shining dark green even through the winter. It is a heavy feeder and should never be planted in soil unless it can get plenty of fertility and moisture.

THE FIRS

FIR, NORDMANN’S. Abies nordmanniana. A pyramidal tree with small dense needles dark green on surface with silvery tones on underside. It is a little slow to get started but when it has developed its tap root will make a fine specimen plant.

FIR, SILVER or WHITE. A. concolor. This tree has unusual light bluish green foliage and rivals the Blue Spruce in attraction in the Spring. It is pyramidal in shape and will grow quickly when it becomes established. One of the best evergreens for the lawn.

HOLLY

HOLLY, AMERICAN, Ilex opaca. Everyone certainly knows the native Holly with its large glossy leaves and red berries. Nursery grown plants are comparatively easy to transplant provided the leaves are clipped off at planting time. This native is not half appreciated as it can be sheared into as compact specimens as Boxwood or if left to develop naturally make a bush or small tree that is wonderful at all seasons of the year. Some plants do not bear berries but these may be had if specially ordered.

THE JUNIPERS

JUNIPER, Blue, Juniperus virginiana 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.

JUNIPER, GREEK, J. excelsa. This is an unusually attractive dwarf pyramidal form with very compact bluish green foliage. It is vigorous in growth and not particular as to soil. Its good characteristics are rather difficult to describe but it is very pleasing wherever used.

JUNIPER, IRISH, J. communis hibernica. This is a decided columnar form and immediately attracts attention. The foliage is a glaucous green. For formal work, especially in contrast with other plants, it has decided advantage over anything you can use for such work. It is very slender in habit of growth and needs no shearing.

JUNIPER, PFITZER’S. J. chinensis pfitzeriana. This is the most popular of all the spreading types. Its habit of growth, its pendulous branches and attractive foliage is strikingly beautiful. The branches are horizontally spreading and the terminals slightly drooping. It lays close to the ground and for edging larger plantings there is nothing superior. Flowing lines are especially valuable in landscape planting and this Juniper seems to fill this requirement better than any other. The foliage is a grey green both summer and winter and because of its ability to withstand the soot and dust of cities will thrive where oth-
Here is an interesting study in evergreens. Note the various forms and colors and habits of growth.

(1) PYRAMIDAL ARBOR VITAE; (2) BERKMAN'S GOLDEN ARBOR VITAE; (3) HEMILCOCK; (4) GLOBE ARBOR VITAE; (5) AMERICAN SPRUCE; (6) AMERICAN ARBOR VITAE; (7) PFITZER'S JUNIPER; (8) RETINOSPORA PLUMOSA; (9) ORIENTAL ARBOR VITAE; (10) MUGHO PINE; (11) IRISH JUNIPER.

ERS fall. Another advantage is that it lends itself to severe pruning in case it outgrows its location.

JUNIPER, SAVIN'S. J. sabina. One of the best. Spreading fan shape habit, of pleasing color of dark green. Stands the city dust, soot, etc., exceptionally well.

JUNIPER, SWEDISH. J. communis suecica. This is another columnar form of grey green foliage and unusually attractive in the winter. Where formal effects are wanted this can be used. It is not as quick in growth as Irish Juniper and in limited areas is preferred.

THE RETINOSPORA OR JAPAN CYPRESS

RETINOSPORA, Pea fruited, or sawara Cypress. Chamaecyparis pisifera. The foliage of this resembles the Arbor Vitae very much and the tree develops decidedly erect with very graceful branches. When sheared especially does the foliage develop its true color. It is very lacy in appearance with a silvery color on the underneath side. It is a fine plant in the foundation where a heavy plant is wanted and on the lawn it makes an attractive specimen.

RETINOSPORA, Golden pea fruited. C. pisifera aurea. This has all the characteristics of the green form described above except that the foliage is a very light green or bordering on yellow. Both of these will do well in city planting where some tenderer evergreens fail.

RETINOSPORA, Plumed or plumed Cypress. C. pisifera plumosa. The foliage of this is a greyish green very fine cut and has a feathery appearance. It resembles a fine cut fern frond at certain stages of its development. Pyramidal in habit of growth and if kept sheared as all varieties of this family should be, in foundation planting it will make a wonderful specimen.

RETINOSPORA, Golden plumed. C. pisifera plumosa aurea. In habit of growth and appearance is like the green form precedingly described. The young foliage is very light green bordering on yellow and for contrast planting for foundation or lawn groups is one of the most popular.

RETINOSPORA, Moss or blue. C. pisifera squarrosa. The foliage of this is very fine cut and of all the evergreens is most lacy in appearance. Its unusual habit of branching gives it an attraction not found in any other of the evergreens. In color the foliage is a very pleasing blue. The plant shears well and usually is seen in a very compact form. If left to grow naturally it is unusually attractive. Should not be planted in sooty or dusty locations.

THE PINES

Pine, Mughu. Pinus montana mughus. This is an excellent dwarf Pine, being globe shaped and erect branching. It is very attractive, especially in spring, when the new growth which seems like miniature candles completely covers the bush.
Pine, Scotch. 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.

Pine, White. 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.

The Spruces

Spruce, Koster's blue. Picea pungens kosteri. It's striking blue color is noticeable as far as can be seen. It is best used as a specimen with a dark background or in groups where contrast is to be had. The past few years it has become very scarce and the plants are decidedly expensive.

Spruce, Norway P. excelsa. This has been the most popular of the Spruce family as it is easy to transplant, hardy and grows rapidly. Pyramidal in shape and when used as a specimen is very fine. For screen, wind break and hedges they are equally appropriate. The needles are dark green in color. Norway Spruce has been largely planted and really has no serious fault.

Spruce, White. Picea canadensis. This is a very hardy evergreen with light green foliage and similar in many respects to the preceding va-riety except that it is decidedly slower growing in our locality and can safely be used where a medium sized or small tree is wanted.

Yews

Yew, Taxus. This is a group of evergreens that is just coming into use in landscape work. In the end it is rather doubtful if they will succeed in most localities out in the open, but along north foundation walls, in semi-shaded positions their value is not appreciated. The foliage is as bright and pleasing as Boxwood, the needles like those of the Spruce or Fir but larger. Plants may be clipped to formal shape or left to develop naturally. They are perfectly hardy in climates much colder than ours, and we believe would do well used in shady spots where other plants fail.

Yes, we furnished the trees!

Kentucky and Jefferson Co. Home,
Lyndon, Ky.

Yesterday Mr. Merriman, along with Mr. Poul-
ter, your farm manager and myself, inspected the young orchard at your institution. I was certainly pleased to see the trees carrying such a good color at this season of the year, and to find that they had made a fine growth. Most of the peach trees have averaged better than two feet of growth, and the apples from 12 to 18 inches, which I consider a fine start the first year. Two things are quite evident; first, that you had good trees to start with, and second, that Mr. Poulter or some of his men have given them considerable attention this summer, etc.

Signed: W. W. Magill,
Field Agent in Horticulture.
Grass Seed

Suggestions for Making a Lawn

Never sow seed until your grade is established and soil is level. It is much easier to grade before planting than after.

Do not attempt to sow in unprepared soil. A good seed bed is all important.

If soil is "sour" hydrated lime applied several weeks before seed will be beneficial. Limestone dust is also highly recommended.

Sow a nurse crop—that is something to shade the ground. In the Fall use rye, in the Spring sow oats and in the Summer either of these or buckwheat.

Rake in seed very lightly. If planted too deep it will not come up.

Mow early and often. Practically all grasses have underground roots (stolons) that spread out when the tops of the grass stools are cut off.

Sowing may be done any month of the year. Very early Spring is ideal. Two pounds will sow a plot 50x50.

Blue Grass Seed

We are situated right in the heart of the Blue Grass region where we secure the very best seed harvested. This seed we offer is fresh, clean and of the highest quality. If you have failed in establishing a lawn, try our seed.

1 pound (about a quart) - 60c postage paid
10 pound lots - - - - - 55c postage paid
25 pound lots - - - - - 45c postage paid

Lawn Grass Mixture

This is a complete mixture containing the right proportions of Blue Grass, Red Top, White Clover and some fancy grasses. These latter come quickly and make a sod while Blue Grass is becoming established. If you are seeding naked ground this mixture is advised.

1 pound (about a quart) - 60c postage paid
10 pound lots - - - - - 55c postage paid
25 pound lots - - - - - 45c postage paid
DECIDUOUS SHRUBS
ADD BEAUTY AND CHARM

In diversity of form, variety of species, contrast of foliage and variation of blossom this group holds unusual interest and as a group they prove to be the finishing touches or tints of virtually all landscape plantings. 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 accomplishments mentioned and provide a source of indescribable pleasure to the home owner.

Note—In the descriptions that follow we give height at maturity, color of blossom and period of bloom. Those specially recommended for foundation planting are thus designated (F). A table, too, will be found on page 27, suggesting plants for various and special locations. An inquiry will bring you any further information necessary.

Planting Suggestions—There is always a tendency to over-plant in the attempt of immediate effect. Don't be impatient as it takes several years to grow mature plants. So in planning your requirements here is a general rule to apply—on real good soil the spread of a shrub usually approximates the height, in other words a five to six foot shrub will just about spread that much. Some exceptions, are: Wahoo, Althea, Sourwood, Lilac and Tamarix.

About Planting—Dig holes and plant as deeply as they stood in the nursery row. Shake the plants so the soil will sift into the roots. Some shrubs have great masses of fibrous roots that if the soil is merely thrown on top, they will surely die. Con- earth carefully through these masses. In pruning take off about one-half the tops, at least a third.

INSTRUCTIONS FOR PLANTING SHRUBS
“Prune until it hurts and then prune more,” was said about shrubs and grape vines. If you haven’t read General Planting Instructions, refer to page 4.

Pruning after development causes confusion. “Prune when the knife is sharp,” has long been a saying and no shrub was ever killed by pruning. However, one time is better than another and unless otherwise necessary you will find that the best results are obtained by light pruning immediately after the blossoms fall. Heavy pruning at any time will cause the plants to put aside their blossom-forming buds and make wood growth and you lose or lessen the next season’s blossom. That is why light pruning is suggested annually or biennially. Pruning in the dormant stage is not injurious and some plants can be so much better shaped when the branches are defoliated. In all pruning do not bob off the tops and make hedges of your massed plants. This causes a new “break” or ugly offset giving them a two-story effect. Shorten the canes to a side branch so that it will develop all the natural pendency or other characteristics of the plant. To remove canes, cut close to the crowns as this causes them to renew naturally from the bottoms. Now for the perpetual exceptions—all terminal blooming plants like Hydrangeas, Hypericum, bush roses, etc., that bloom on the “tips” of the new growth need severe pruning if large blossoms are wanted. Constantly renew this young wood by pruning in the dormant and semi-dormant period only.

**ABELIA. A. grandiflora (F).** 2-4 ft. white. July to September. This is a comparatively new shrub. It is one of the most attractive of the newer plants and we predict that it will become as popular as Spirea Van Houtte. It is just a little tender but only once in a very great while is it seriously injured. When frozen it comes very quickly from the crown with renewed vigor and by July is again full of attractive blush tinted bell shaped blossoms. There is hardly a plant that blooms over quite as long a period. The leaves are especially attractive, being very glossy dark green. It is classed as a semi-broad-leaved evergreen and in mild winters will hold its foliage throughout that season. Does well in shady as well as sunny locations and will adapt itself to all types of soil.

**ALMOND. Pink-flowering Almond. Prunus glandulosa.** (F). 3-4 ft. Rose-pink. April. Very attractive shrub. The plants are usually thickly studded with double pink flowers of medium size from base to tip of branch. The plants are usually propagated on plum or peach stock as it belongs to this family and should be planted deeper than ordinarily advised for other shrubs.

**ARALIA. Acanthopanax pentaphyllum. Five-leaved Aralia.** 6-8 ft. Yellow. June. This is an unusually hardy shrub, thriving in very adverse soil and city conditions. It will grow under the shade of trees where all else fails. The flowers are inconspicuous but the foliage is very attractive. The canes are inclined to be prickly and comparatively upright in their habit of growth.

**ARALIA Spinosa. Devil’s Walking Stick or Hercules Club.** 12-14 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.

**ALTHEA. Rose of Sharon. Hibiscus Syriacus.** These are tall slender shrubs that do well under congested city conditions and other places where some of the woody plants fail to grow. The blossom period usually starts in July and extends to September. Altheas are greatly used for hedge and screen purposes. Please note they may be bought to color.

**Single White.** Blossoms white with pink center.

**Single Pink.** Selected for clear deep pink blossoms.

**Double White (Jeanne d’Arc).** This is a pure white, double-flowering variety. Very attractive.

**Double Red (Boule de Feu).** Freest blossoming of all the doubles. Very attractive; bright in color.

**BARBERRY, PURPLE. Berberis vulgaris atropurpurea.** (F.) 4-6 ft. Yellow. May. An English variety; one of the most attractive foliaged shrubs we have. Royal purple leaves appear in April and 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 en masse it is very desirable. For foundation especially on lighter colored background it is without a peer.

**JAPANESE BARBERRY**

Berberis Thunbergi. (F). 2½-3 feet. Yellow. June. This without a 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 an edging plant for borders, foundations or hedges, its drooping habit, deep green foliage in the summer months and red berries that hang all winter, are attractive. We grow large quantities of this and hesitatingly recommend it to every one that desires a hardy, thrifty plant that will adapt itself to soil conditions under most trying circumstances. Does not carry wheat rust.

**BUTTERFLY BUSH,** or Summer Lilac. Buddleia Davidi. 4-6 ft. Violet. July-September. 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 very conspicuous purple and violet flowers that attract butterflies.

**Callicarpa purpurea.** 3 ft. Pink-tinted blossoms in August followed by clusters of violet-purple berries. Perennial in that it frequently is winter killed, but comes again.

**Calycanthus floridus.** Sweet Shrub or Allspice. (F). 4-5 ft. Chocolate brown. This is an old-fashioned shrub well known to everyone. It blossoms intermittently all summer and its flowers are usually very sweet scented.

**Coral Berry** or Indian Currant. Symphoricarpsus vulgaris. 4-5 ft. June. This is a native shrub that in many localities grows in great masses. It is very hardy and easy to establish where other things fail. Its beauty lies in the wonderful wealth of coral berries that come in late summer and usually adhere all winter.

**Cranberry.** Highbush Cranberry. Viburnum opulus. 8-10 ft. White. May. This plant belongs to the Snowball family and is unusually attractive because of its bright berries that attract birds in mid-summer and also for its color effect in the Fall. The flowers are inconspicuous. This is one of the best things for natural planting but owing to scarcity of stock it has not been largely used.

**Crabs, Bechtel, Flowering.** Malus ioensis plena. 10 ft. Pink. May. This is an unusually attractive tree in full blossom; flowers being fragrant, double, resembling a miniature rose. The foliage is very much like an ordinary apple tree but there is no plant in the catalogue that is quite as attractive as it is when in full blossom. Rather slow growing and more expensive than ordinary shrubs but well worth the space it occupies.
CRAPEMYRTLE. Lagerstroemia indica. Familiar to everyone living in the South. It has small, very dark green shining leaf, and blossoms in August and September in panicles of peculiar but attractive flowers. Can furnish pink, red and purple. Not hardy in many places in Kentucky.

DEUTZIA. D. Scabra candissima or Snowflake Deutzia. 6-10 ft. White. June. A Japanese shrub noted for its hardiness, fine habit of growth and profusion of attractive flowers which are borne in racemes. The small flowerettes resemble double Lilly of the Valley. Where quick effect and screen is wanted this is a very desirable plant.

D. gracilis. Slender Deutzia. F. 1 1/2-2 1/2 ft. White. May. This is a dwarf shrub very dense in growth, blooming profusely in small racemes on arching branches. Sometimes caught by late freezes but in protected places can be used as a low growing shrub for border planting. We have some trouble occasionally, it being troubled with leaf spot and mildew.

D. Pride of Rochester. D. scabra. F. 6-8 ft. Pinkish white. June. This variety is very much the same as Deutzia candissima, but is more popular on account of its color. It is very hardy, adapting itself to any type of soil and if better known would be one of the most popular shrubs planted today.

DOGWOOD. Cornus florida. White Flowering Dogwood. 15-20 ft. White. May. This is really a small tree and should be classed with shade trees. Description also appears on page 21. As a background for shrubs this and Redbud are largely used. We hardly know of a plant that is quite as attractive in all seasons of the year as our native Dogwood.

Dogwood. Blood-twig Dogwood. C. Sanguinea. 7-8 ft. Greenish white. June. This is a true
Osier, being adapted to moist places. It is a strong grower. The stems of this variety are deep red and are very attractive in winter.

**Dogwood.** **Red-twigged Dogwood.** C. sibirica. 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.

**ELDER.** **Golden American.** Sambucus canadensis. 8-10 ft. White. July. This is one of the best foliage plants grown under southern conditions. It holds its bright color the entire summer and is very conspicuous in a mass planting. It has the usual Elder blossom of large size and this is followed by a very attractive berry. All Elders are quick to establish themselves and do well on all types of soil.

**EUONYMUS or Wahoo.** E. atropurpureus. 6-8 ft. Yellow. May. An unusually attractive native plant that is moderately slow growing. The dark green foliage is followed by berries that hang on a great portion of the winter. The plant usually does not spread a great deal, being erect in habit of growth, but severe pruning will make it branch heavily.

**EXOCHORDA, or Pearl Bush.** E. grandiflora. 8-10 ft. White. April. This is a plant that is not as well known as it should be. It is one of the most pleasing of the early Spring flowers, being a mass of blossom during April. The leaves are light green, of unusual construction and in mass planting should be used extensively. Prune severely at planting time for best results.

**FORSYTHIA or Golden Bell.** F. viridissima. This is often called Green-stemmed Golden Bell. 6-8 ft. Yellow. April. This is decidedly the most popular of all the Golden Bells. The flowers appear before the leaves and the plant makes a great show early in the spring.

**Fortune's Golden Bell.** F. Fortunei. 6-8 ft. Yellow. April. A form of F. suspensa, but with more upright branches and darker, heavier foliage.

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

**Halesia or Snow Drop.** H. diptera. 12-15 ft. White. April. Attractive small bushy tree, suitable for border planting and blooming after Dogwood. The flowers resemble the Snowdrop. Sometimes called Silver Bell.
HYDRANGEA, Snowball. H. arborescens grandiflora. (F). 3-4 ft. White. May and June. (Also called 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.

Hydrangea, Old-fashioned. H. paniculata grandiflora. (Great Panicled 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.

HYPERICUM. St. John's Wort or Gold Flower. 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.

HONEYSUCKLE. Fragrant Bush. L. fragrantissima. (F). 7-10 ft. White. April. So called because of its very fragrant blossom. The foliage is very deep green and glossy. This grows well in partial shade, in adverse soil or in cities where tender plants fall. Because of its nearly evergreen habit it is being largely used for hedges. Without doubt one of the very best plants for landscape purposes grown today.

HONEYSUCKLE. Morrow's Honeysuckle. L. morrowii. 8-12 ft. This is one of the best quick growing, compact and "filler" shrubs we have. The foliage is bright green, the blossoms cream colored appearing in April. The red and coral fruits follow from June to August. In dry or moist soil, shade or sun, city or country, this variety will thrive.

L. tatarica. 7-9 ft. Pink. April. This is very attractive in blossom, being one of the few early pink flowering shrubs. Has bright red berries that stay on all summer.

JAPONICA. Japanese Quince or Flowering Quince. Cydonia Japonica. 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. If it can be kept free of San Jose scale will pay for the space it occupies in any planting.

LILAC. COMMON white. Syringa vulgaris alba. 6-8 ft. April. No shrubs are better known than the Lilac. This is the old-fashioned white that everyone knows.

LILAC. Common purple. S. vulgaris. 7-10 ft. This is the old-fashioned variety always so familiar in our grandmother's garden. Usually more vigorous in growth than the white variety.

LILAC. French. These are the very much improved variety sold to name and color. They bloom unusually soon after planting and their large trusses of blossoms are very attractive. They are more expensive than the common variety but where space is limited are certainly worth planting.

MAHONIA, aquifolium. This resembles Holly in its foliage and is a fine evergreen for planting in foundation and mass plantings. Has bright yellow blossoms followed by blue berries.

MOCK ORANGE or Syringa. Philadelphus coronarius. Sweet Mock Orange. (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. Very valuable for back ground, screen or grouping.
MOCK ORANGE. P. grandiflorus or Large flowering Mock Orange. 7-10 ft. White. June. This is a more vigorous grower than the preceding but lacks the fragrance. Blossoms are larger and very attractive. Where a tall plant is wanted there is hardly anything better than this. Succeeds under all soil conditions.

OXYDENDRON arboreum. 10-12 ft. White. July-August. Also called Sourwood. Flowers resemble Lily-of-the-Valley, but borne in panicles. Foliage most brilliant in fall.

PRIVET Amur or Amoor. Ligustrum amurenses. (F). 6-10 ft. White. June. A small leaved almost evergreen variety of Privet that is much used for hedges but also very desirable for landscape work because of its unusual rapidity of growth, good foliage and graceful branching. It is not particular about soil and for semi-screening and mass planting is unexcelled. It is not used enough as a shrub. We are very partial to its use in the south. Hardy where California Privet will succeed.

PRIVET Iwota. L. Iwota. 6-10 ft. This is another of the Chinese type, resembling Regels Privet very closely but being more erect in growth. Its bronze foliage in the fall and attractive berry make it valuable. Then, too, its hardness and ability to withstand not only severe weather, but adverse weather conditions, make this and Regel's Privet a very desirable plant for mass planting.

PRIVET. Regels. L. ibotum regelianum. (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.

RHODOTYPOS or Jetbead. R. kerriodes. (F). 4-5 ft. White. May and June. Very ornamental shrub with bright green, plaited 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 fruit that adhere practically all winter. A desirable shrub.

SNOWBALL. Common. Viburnum o. sterile. 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.

SNOWBALL. Japanese. Vib. tom. plicatum. (F). 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 plaited leaves and perfect form make it one of the best. Fine for an individual specimen or in groups.

SNOWBERRY. Symphoricarpos racemosus. (F). 4-5 ft. This shrub has small pinkish flowers in July, followed by white berries which remain on well into the winter. Very attractive medium growing shrubs.

SPIREA. 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. callosa rosea. (F). 3 ft. Deep pink. June-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 Billiardii. Terminals of each branch crowned with flower spike six inches long.

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. (F). 4-5 feet. White. May. This is one of the best of the Spirea group. White flowers borne along the stem just as the foliage appears makes a most attractive bush wherever used. The foliage ap-
PEARS 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.

S. Thunbergii (Snow Garland). (F). 2-1/2-3 1/2 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 Houtte (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, pendulous 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. This variety can be used in any location for hedging, grouping and mass effect. There is nothing superior in the catalog. When in doubt what to use, plant Spirea Van Houtte.

SUMAC. Shining. Rhus copallina. 7-10 ft. The native variety that colors so wonderfully in the Fall. It is not as robust a grower as some of the others but because of its glossy foliage in the summer, and unusual brilliance is most desirable.

Sumac. Cut leaved. R. glabra Laciniata. 8-10 ft. The foliage of this is very fine cut and fern-like which gives it a tropical appearance. It colors yellow and orange in the Fall.

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

SYRINGA. See Mock Orange.

TAMARIX. Five-stamen. T. pentandra, often called T. aestivalis. (F). 5-7 ft. Pink. June. Shrubs with strong but slender, delicate growth. Filmy, blue grey foliage similar to asparagus with carmen pink flowers in June and scattered blossoms the balance of the summer making it an unusually desirable shrub. Will grow in poor and dry soil.

Tamarix. African. T. africana. 7-10 ft. Lavender-pink. April. This is the most vigorous of the Tamarix family. It has strong canes that bend gracefully as they lengthen. The blossoms appear on the stems before the foliage and are pleasing in mass planting. Sea green foliage and drooping habit make it very desirable for background or inter-planting in shrub borders.

WAYFARING TREE. Viburnum lantana. (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.

WEIGELA. White or snow 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.

Weigela red. W. Eva Rathke. (F). 3 1/2-4 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 brilliantly 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.

Weigela rosea. (F). 4-5 ft. Pink. May. The most popular Weigela sold today. Its delicate pink bell-shaped blossoms are borne in great profusion along great arching canes. There is also a scattering of blossoms throughout the summer. The leaves are large and especially free of disease. This variety is the best of the group and is good for all use where a shrub this height is needed.

WITCH HAZEL. Hamamelis virginiana. 8 ft. Yellow. November. A thrisside shrub for producing naturalistic effects. Grows well in shade. Large in leaf and unusual because of period of blooming.
VOLUMES could be written of trees, of their value and of their beauty. They are the oldest living things. To us they have been a heritage from preceding generations and common to all mankind we have an inborn love for them. They bring you natural beauty wherever used, whether it be on lawn, pasture, avenue or park. For shelter or shade, for fruit or blossom, for framing natural pictures, screening objectionable views, for backgrounds or seclusion they are indispensable.

Might we suggest a careful selection of what you plant? They all have some faults if not properly used. Some trees are rapid and some of slower growth. Plant for permanency the hardwood types. They grow a little slower but when you think of their longevity, beauty of form and foliage you will feel that you have made the better choice. If quick effect is wanted, interplant with the rapid growing varieties which can be removed when necessary. Plant them liberally and in groups, for they love companionship. If you do you will enjoy them and leave a legacy for succeeding generations.

Planted Suggestions—Plan to plant permanent trees 40 feet apart and those not so robust at 30 feet. Where quick growing trees are interplanted 20 or 25 feet is suggested. Also there is a list on page 27, for the convenience of those who are in doubt of what to use.

Be very sure to prune all shade trees at time of planting. This should consist of shortening the side branches, taking off generally the last season’s growth or more. We prefer not to dehorn the tops but rather shorten the central leader in proportion to the pruning done on the side branches. Avoid making crotches if possible, as trees later may break under ice or wind. We strongly recommend wrapping the bodies of all trees with some protective material like burlap, paper, etc. Under our southern suns you are very likely to have badly scalded trees on the southwest side, near buildings or pavements, the reason being they are closely grown in the nursery row and there have the protective shading from the neighboring trees and the trunks are consequently tender. Usually after the second year you are safe in removing protection.

Mulching is very fine, too, to conserve the moisture. In exposed places it should be applied only in the spring on newly set large trees as it keeps the ground from freezing and the wind and weather sway the bodies, making air pockets about the roots. On small trees apply at any time.

In watering on the surface remember to give copiously as shade trees are planted much deeper than the other plants you are usually accustomed to watering. Tilling is especially fine because in this way you get the moisture down ten or twelve inches where the active root system can quickly take it up.

SHADE TREES
ASH, American. Fraxinus 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.
ASH, Black. Fraxinus nigra. This tree is quick growing, leaves large and leathery and unusually dark green. While native of low, will do well on high ground.
ASH, Blue. F. quadrangulata. This is another native tree of quick growth thriving on both dry and moist soil. Branches spreading, foliage very healthy, tree growing rapidly and easy to transplant. Should be used with caution as a sidewalk tree because of its surface roots.

BEECH, European. Fagus 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 fall.

BEECH, Purple. F. sylvatica 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 midsummer 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 foreground of light colored buildings for contrast, it can be highly recommended.

BIRCH, European white. Betula alba. Tree of moderately quick growth, bark almost white, erect growing with terminal branches slightly drooping. Native of moist places but will do well when planted on dry ground. As a specimen tree and especially contrasted with evergreens it makes a valuable tree for the lawn.

BIRCH, River. B. nigra. This is a native tree with darker bark but in foliage and general characteristics resembles the other Birches.

BIRCH, Weeping, white. B. pendula gracilis. This tree is one of the most conspicuous trees grown. With its white bark, deeply cut leaves and long pendant 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.

BIRCH, purple. B. pendula purpurea. Tree is a typical Birch; bark a dark hue and the leaves purple in color. Branches follow the general Birch habit—drooping gracefully.

BUTTERNUT or White Walnut. Juglans cinerea. This native tree is perhaps the most precocous of the nut bearing trees. In growth it is rapid making a round-headed tree. If you want nuts quickly, plant Butternuts.

CATALPA, Umbrella. 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.

HOW TO SELECT TREES

We believe that the accompanying chart of typical tree forms will interest you. Have you ever thought about the amazing consistency of Nature in grouping these shapes? And have you ever thought about the difference in effect different trees will make near a house?

In choosing trees for a home, study the house. If it's high and seems to stick up in the air too much, plant a tree that will tower and spread over it, or else one that will shoot up tall and narrow and make it seem lower by opposition to its horizontal lines, such as the coves. If it's a low house, it can be made to hug the ground or rise higher as seems best by placing the right tree.

Women are pretty good judges of such things. They eternally study just such problems in clothes and hats.
CATALPA, Western. 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.

DOGWOOD, White Cornus florida. A native tree well known to everyone. There is hardly a woody plant that grows that is quite as useful as our native Dogwood. Its blossoms are conspicuous, coming early in the Spring, the foliage is attractive all Summer and in the Fall colors beautifully with red berries that hang on most of the winter. It is beautiful at all seasons of the year. It can be used as a specimen or in groups, as a background for shrub borders and when planted in contrast with bright flowering plants like Redbud it is especially showy.

DOGWOOD, Pink. 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.

ELM, American. Ulmus americana. A tree of unusual vigor, a native too well known to describe. It is rapid of growth, with its long, spreading and pendant 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.

Elm. Cork-barked. U. foliaca suberosa. This has all the characteristics of the native Elm except the bark is very unusual, being in prominent ridges along the trunk and branches. Rather an attractive tree in the winter time because of this unusual characteristic.

GUM, Sweet. Liquidambar sytaciflua. 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.

HORSE CHESTNUT, European. Aesculus hippocastanum. A tree of slow growth, yet very attractive in its roundish form with large leaves that are conspicuous in early summer. It is specially valued for the long panicles of flowers, white and tinged with red.

KOELREUTERIA. Golden Rain or 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 surrounded in July with showy yellow flowers in large panicles. The foliage in fall changes to a bright but pleasing yellow.

KENTUCKY COFFEE. Gymnocladus dioica. 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.

**LARCH, European.** Larix europaea. 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.

**LINDEN, American or Basswood.** Tilia americana. This native tree is very attractive and will grow rapidly when planted in low ground. The leaves are distinctly larger than other varieties, branches pendulous in habit of growth and makes an excellent shade tree under favorable conditions.

**LINDEN, European.** T. vulgaris. 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.

**MAGNOLIA or 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. Very satisfactory.

**MAGNOLIA, Southern.** 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.

**MAIDEN HAIR.** 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.

**MULBERRY, Russian.** Morus 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 years.

---

**HORSE CHESTNUT**

---

**A GROUP OF BEAUTIFUL TREES**
MAPLE, Silver or Water, Acer dasyacarpum. 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.

MAPLE, Sugar. Acer saccharum. 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 imaginable. 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.

OAK, Burr or Mossy Cup. Quercus marocarpa. 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.

OAK, Pin. Quercus 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. We are very partial to it and when a hard wood tree is wanted for any location we unhesitatingly recommend Pin Oak. If you knew it as we do you would be equally enthused.

OAK, Red. Quercus rubra. Not as compact as Pin Oak, equally as rapid and a little more

NORWAY MAPLE

months. The fruit is considerably smaller than our native variety but the tree bears so profusely that it is visible for a considerable distance.

MULBERRY, Weeping. Morus alba 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 some fruit.

MAPLE, Cork-barked or hedge. Acer campestre. An interesting dwarf tree, conspicuous because of its winged bark, bright autumnal foliage and bushy habit of growth.

MAPLE, Norway. Acer platanoides. A tree resembling the Sugar Maple 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 over 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.

MAPLE, Red. Acer 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.

MAPLE, Schwedler's. Acer platanoides 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.
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.

**POPLAR, Lombardy.** Populus nigra italica. A tall slender tree reaching great heights, very easy to transplant and of most rapid growth. Specimens often reach 50 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 plantings 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 this is a misapprehension, as the tree is healthy in growth and foliage (see cut). Not the same as Carolina Poplar, description of which follows:

**POPLAR, Carolina.** 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.

**POPLAR, Tulip.** See Tulip Tree.

**PECAN, Hickoria Pecan.** There has been a great deal said about these of late but on our soil conditions they are very hard to establish and exceedingly slow of growth. They are hardly worth trying on limestone soil and unless you have more favorable conditions than in Central Kentucky they will be disappointing. We have found the seedling trees to be more vigorous than the budded varieties where favorable locations are to be had. For fruit there is no comparison as the named varieties are much superior and we would advise the purchase of these if you wish to experiment with them.

**REDBUD or Judas Tree.** Cercis 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 harbinger 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.

**SYCAMORE, American 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.

**WILLOW, Weeping.** Salix babylonica. A tree of stately appearance with long pendant branches awaying 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.

---

**YOUR PROTECTION.**

Agents go from door to door offering apparently attractive values in trees. For your own sake consider that these tree peddlers have no responsibility and you have no assurance of receiving trees of proper quality. In buying from the Hillenmeyer Nurseries you not only pay less because of our policy of selling to you direct, but you have the satisfaction of dealing with a responsible organization. Our many years of satisfying service are our best guarantee.
HEDGES --- BEAUTIFY as they SERVE

For boundary, screen or barrier there is nothing more pleasing than a hedge fence. With their bright green leaves they constantly bring a feeling inspired by the fresh foliage of spring. When formally trained or left to develop naturally their arched branches, colored foliage and bright berries are surely more pleasing than the mechanical effect obtained by the similar use of wood or metal. Most hedges are permanent and with the exception of occasional shearing they need little attention after being established.

Planting. The distances vary according to the conditions. Where an impenetrable hedge is wanted plant the Privets 6-10 inches, Japan Barberry 8-12 inches and the flowering shrubs 12-18 inches apart. Where height is wanted rather than thickness then double the distance. The size of stock purchased will make but little difference in planting distance. In planting, place as deeply or slightly deeper in the trench than they stood in the nursery row and firm well. Most hedges should be severely pruned at planting time. It seems as though you are cutting away good wood but to encourage growth from the bottom it is necessary to do this.

The after pruning should consist of clipping the young growth at regular intervals. There is no special time except it might be well to avoid late pruning in the fall as this encourages young growth that is frequently killed by severe weather. Hedges of flowering shrubs never bloom well when pruned formally because the flowering wood is constantly being removed.

CALIFORNIA PRIVET

Ligustrum ovalifolium. A semi-evergreen hedge with thick, shining leathery leaves, that grows very rapidly, can be pruned into any formal effect and planted by every one 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. We have quantities of this desirable variety.
AMOOR RIVER PRIVET, SOUTH

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

REGEL'S PRIVET

Ibota regelianum. This is the hardiest 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.

THUNBERG'S BARBERRY

Berberis thunbergi. This Japanese shrub is being used more and more as a hedge. Not as quick in growth as 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.

FRAGRANT BUSH HONEYSUCKLE

Where high hedges are wanted there is nothing better. This hedge is semi-evergreen and will give you privacy the entire year. Of the many tall growing hedge plants now offered we consider this the best. It blossoms very early in the spring and is unusually fragrant. The glossy leaves immediately appear and these remain well into the winter.

OTHER HEDGE PLANTS

We offer Spireas, Altheas, Hydrangea, Abellas, and other blooming plants in hedge sizes. Write for prices.

Walks and water, formal evergreens and blooming things make this garden inviting and beautiful. From the home or the pergola you can enjoy this garden every minute of the day, summer or winter. Gardens such as this have such an alluring charm for with its natural setting, its fine proportion and planted with things of successive beauty you can enjoy it always. Taken on the grounds of COLONEL and MRS. ROBERT EVANS, DANVILLE, KY. R. A. TACKE, L. A.
## FOUNDATION OR BASE PLANTINGS

Note descriptions for height

### THOSE SUITED FOR “FRONT LINE PLANTING”
- **Japanese Barberry.** See pages 12, 13.
- **Spirea Thunbergii.** See page 18.
- **Spirea Anthony Waterer.** See page 17.
- **Hypericum.** See page 16.
- **Abelia.** See page 12.
- **Deutzia gracilis.** See page 14.
- **Globe Arbor-Vitae.** See page 7.
- **Greek Juniper.** See page 8.
- **Mugho Pine.** See page 9.
- **Savina’s Juniper.** See page 9.
- **Pfitzer’s Juniper.** See pages 8, 9.
- **Yews.** See page 10.

### FOR INTERMEDIATE (4 to 6 FEET)
- **Spirea Van Hoote.** See page 18.
- **Spirea Reevesii.** See pages 17, 18.
- **Purple-leaved Barberry.** See pages 12, 13.
- **Hydrangea.** See page 13.
- **Golden Bell.** See page 13.
- **Wigelas.** See page 18.
- **Abelia.** See page 12.
- **Calycanthus.** See page 13.
- **Kerria.** See page 17.
- **Snowberry.** See page 17.
- **Arbor-Vitae in variety.** See page 7.
- **Reinisaora in variety.** See pages 8, 9.
- **Junipers in variety.** See pages 8, 9.
- **Holly.** See page 13.
- **Boxwood.** See page 8.
- **Japanese Snowball.** See page 17.

### TALLER GROWING FOR HEAVY PLANTING OR CORNERS
- **Tamarix astilbas.** See page 18.
- **Amoor River Privet.** See pages 17, 26.
- **Regis’s Privet.** See pages 17, 26.
- **Viburnum Lantana.** See page 18.
- **Althea.** See page 12.
- **Mock Orange.** See pages 16, 17.
- **Spirea prunifolia.** See page 17.
- **Loniceras.** See page 17.

### FOR STREET OR AVENUE PLANTING
- **Pine Oak.** See page 25.
- **Sugar Maple.** See page 23.
- **Norway Maple.** See page 23.
- **Sycamore.** See page 23.
- **European Linden.** See page 22.
- **Elm.** See page 21.
- **Ash.** See pages 19, 20.
- **Lombardy Poplar.** See page 24.

### TREES FOR QUICK EFFECT
- **Ash.** See pages 19, 20.
- **Catalpa.** See pages 20, 21.
- **Dogwood.** See page 21.
- **Horse Chestnut.** See page 21.
- **Linden.** See page 22.
- **Magnolia.** See page 22.
- **Flowering Crab Apple.** See page 13.
- **Japan Varnish.** See page 21.

### TREES THAT FLOWER
- **Catalpa.** See pages 20, 21.
- **Dogwood.** See page 21.
- **Horse Chestnut.** See page 21.
- **Linden.** See page 22.
- **Magnolia.** See page 22.
- **Flowering Crab Apple.** See page 13.
- **Japan Varnish.** See page 21.

### PLANTS THAT COLOR IN THE FALL
- **Ash.** See pages 19, 20.
- **Dogwood.** See page 21.
- **Sweet Gum.** See page 21.
- **Sugar Maple.** See page 23.
- **Red Maple.** See page 23.
- **Barberry.** See pages 12, 13.
- **Snowball.** See page 17.
- **Oaks.** See pages 21, 24.
- **Japan Varnish.** See page 21.
- **Sumac.** See page 18.
- **Spirea prunifolia.** See page 17.

## FOR SCREEN PLANTING

Note descriptions for height at maturity.

- **Lombardy Poplar.** See page 24.
- **Willow.** See page 24.
- **Practically all shade trees.** See pages 19, 24.
- **Norway Spruce.** See page 10.
- **Hemlock.** See page 6.
- **Pines.** See pages 9, 10.
- **Bush Honeysuckle.** See page 16.
- **Althea.** See page 12.
- **Deutzia.** See page 14.
- **Mock Orange.** See pages 16, 17.
- **Snowball.** See pages 17, 26.

### WOODY PLANTS FOR PARTIAL SHADE
- **Boxwood.** See page 8.
- **Hemlock.** See page 8.
- **Junipers.** See pages 17, 26.
- **Yews.** See page 10.
- **Mugho Pine.** See page 9.
- **Holly.** See page 8.
- **Euonymus.** See page 15.
- **Abelia.** See page 12.
- **Barberry.** See pages 12, 13.
- **Dogwood.** See page 21.
- **Hypericum.** See page 16.
- **Privets.** See pages 17, 26.
- **Snowberry.** See page 17.
- **Witch Hazel.** See page 18.
- **Coralberry.** See page 11.
- **Wigelas.** See page 18.
- **Golden Bell.** See page 15.
- **Mock Orange.** See pages 16, 17.
- **Kerria.** See page 17.
- **Calycanthus.** See page 13.
- **Honeysuckle.** See page 15.
- **Aralia.** See page 12.
- **For Dry Places**
  - **Junipers in variety.** See pages 8, 9.
  - **Aralia.** See page 12.
  - **Barberry.** See pages 12, 13.
  - **Privets.** See pages 17, 26.
  - **Bush Honeysuckle.** See page 16.
  - **Yucca.** See pages 16, 17.
  - **Deutzia.** See page 14.
  - **Sumac.** See page 18.
  - **Aralia.** See page 13.
- **For Moist Places**
  - **Birch.** See page 20.
  - **Maple.** See page 23.
  - **Sweet Gum.** See page 21.
  - **Sycamore.** See page 24.
  - **Willow.** See page 24.
  - **Lombardy Poplar.** See page 24.
  - **Red-twisted Dogwood.** See page 15.
  - **Spirea Douglasi.** See page 17.
  - **Elder.** See page 13.
  - **Ash.** See pages 19, 20.
  - **Elm.** See page 21.
  - **Oaks.** See pages 23, 24.
  - **Hemlock.** See page 8.
  - **Arbor-Vitae.** See page 7.
  - **Snowball.** See page 17.
  - **Tamarix.** See page 16.
  - **Larch.** See page 22.

### ATTRACTIVE OF BARK AND BERRY
- **Snowberry.** See page 17.
- **Corallberry.** See page 13.
- **High Bush Cranberry.** See page 11.
- **Red-twisted Dogwood.** See page 15.
- **Euonymus.** See page 15.
- **Barberry.** See pages 12, 13.
- **Dogwood.** See pages 12, 13.
- **Privets.** See pages 17, 26.
- **Sumac.** See page 18.
- **Wayfaring Tree.** See page 18.
- **Bush Honeysuckle.** See page 16.
- **Elder.** See page 15.
HARDY PERENNIAL FLOWERS

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.

PLANTING SUGGESTIONS

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.

May it be said that these plants thrive better in fertile ground, and with 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 plant.

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. 4-6 feet.

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.

Beard Tongue or Penstemon. Has tall spikes of brilliant scarlet, tubular shaped and bearded flowers. 4 feet. Period of bloom July and August.

Bleeding Heart or Dicentra. An old time favorite. Its arching stems bear drooping heart shaped flowers of white and old rose. Grows in shade. 1-2 feet. May and June.

Campanula—CANTERBURY BELL. Another garden favorite. Blossoms borne on long stems in many shades and colors. Partial shade and rich soil produce the better blossoms. This is a biennial, but should be in every garden. May and June. 2½-3 feet.

Carnations. These are the hardy border Carnations. We offer these in mixed colors. The flowers are medium sized and have all the characteristics of the varieties grown under glass. 1-2 feet. June to September.
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 frosts by covering. Height, 2-3 ft. The flowers are very attractive, borne in large quantities.

Colors

White
Pink
Yellow

CONE FLOWER. Rudbeckia purpurea. Purple red petals with cone shaped center. Height, 2 ft. June to August.

Coreopsis. A beautiful yellow flower, desirable for cutting or for border. After blooming the seed may be cut away and a good secondary blossoming will follow all through the summer. Height, 3-4 ft. Graceful. June to August.

Delphinium, Light Blue, Belladonna. The praises of this variety have been sung by every lover of the hardy border. Light turquoise blue flowers are borne in spikes, the first coming in June. These may be cut away and young growth will start from the crown, producing blossom all summer. Height 3-4 ft. Mulch lightly, as crown sometimes rots in winter.

Delphinium, Dark Blue, Bellosamum. This is an improved dark blue with all the other characteristics of the preceding. 3 ft. June to September.

Delphinium, English Hybrids. These are taller growing, being 4-5 feet and in all shades of light and dark blue. June to September.

FOXGLOVE—Digitalis. This biennial is an old garden favorite. The flowers are borne on long stems (3-4 feet), and during their period of blossom are the most attractive thing in a border. These plants are not offered as to color, but are mixed seed from best plants. They are, ordinarily, very easy to grow, thriving in loose, rich soil. May and June.

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. 2-3 feet.

Geum or Avena. A new border plant producing large dazzling scarlet flowers. 1-2 ft. May to July.

Gypsophila paniculata.—BABY’S BREATH—2½-3 feet. May-June. Tiny white flowers with slight pink coloring. Almost a mist of feathery bloom. Attractive and useful to “soften” stiff stem flowers in bouquets and desirable for drying for similar use in winter.

Helianthus — SUNFLOWER — Miss Mellish. A beautiful yellow, blooming in August and September, flowers being two 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.

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.

Hibiscus — MALLOW MARVELS. Larger and more brilliant than the old forms. Plants frequently grow five feet and during July and August produce flowers 8 and 10 inches across, especially if given water. We can furnish in white, pink and red.

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 back ground or centers of beds.

Eulalia gracililma. 3-4 feet. This is the most graceful of grasses, and therefore most popular. For individual or mass planting it is unexcelled.
Eulalia variegata. Long narrow leaves with prominent white stripe. Medium grower.

Eulalia pennisetum. Dwarf. 2–2 1/4 feet. Very fine leaves and excellent for borders.

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

LILLY, Hemerocallis. Day. These are the popular Lillies that thrive in any border. Like moist and semi-shaded location but will grow anywhere. Color yellow. June and July. 2-3 ft.


Pachysandra—JAPANESE SPURGE. Fine evergreen ground cover for shady locations. Once established makes a perfect mat.

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 colors 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 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.


Pinks. Hardy double variety of perennial Pinks, often called Florist's Pink. 1 ft. Blooms profusely in June.

Platyodon—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 2 1/2-2 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.

Pyrethrum—PAINTED DAISY. One of the most desirable perennials blooming in May and June. Attractive. We list mixed shades. 2-3 feet.

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 5-6 ft. stalks. Very desirable.

Sedum, or STONECROP. Thick cactus-like leaves that are attractive from early spring, producing flat terminal clusters of pink flowers in August and September.

SHASTA DAISIES. Vigorous growing plants, height 2 1/4–3 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. Plants from seed of improved Alaska type. June and August.

LATHYRUS. Sweet Pea, Perennial. This is a hardy vine, robust growing and fine foliage. Flowers in shades of pink, continuous blooming from June to frost.

SWEET WILLIAM. 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. 15-24 inches.

Newport Pinks. These are similar to the ordinary Sweet William save in color; are all light salmon pink.

Tritoma—RED HOTTUBER. 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 filamentosa—ADAMS NEEDLE or THREADED PLANT. A stately evergreen thread-leaved plant producing spikes of creamy white flowers.
GRASSES, PERENNIALS AND ROSES

borne on tall stems. The individual flowers resemble the tuberose. Desirable to plant about a grave or wherever it may raise its majestic head in full array. June.

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, 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 Iris, and the varieties we offer are exceptionally meritorious, being selected for variety and distinct coloring.

Black Prince. Standards light lavender; falls lavender.
Florentina alba. Standards and falls white, tinged with yellow and blue.
King. Standards lemon yellow; falls statiny 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. The old-fashioned royal purple variety.
Queen of May. A soft rose-lilac, almost pink.
Walneri. Standards lavender; falls a purple-lilac.

We also have from trial rows in limited quantity:

Chester Hunt
Gagus
Hlawatha
Honorabalis
John DeWitt

JAPAN IRIS

This is the latest blooming of the Iris. Anyone 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. C. Lavender.
B. Dark Purple. D. Rose.
E. Mahogany.

SI BERIAN IRIS

PEONIES

Flowers

There is no doubt but that the Peony is the superior perennial. Those who now know the newer and better varieties or who have seen them in comparison with the older kinds readily admit that there is nothing quite surpassing them in beauty and charm. Of all the perennials they are the most permanent. They are hardy anywhere an apple tree will grow. They are long lived as you no doubt recall those that were so long in your grandmother’s garden. Their ease of culture, hardiness, and freedom from disease and insect pest makes them rightfully popular. Much has been written and said about the Peony and of all that has been printed or heard I have yet to hear an exaggeration.

Planting. It thrives best in deep, rich soil and a sunny exposure. It will grow in partial shade but usually proves a complete failure when planted under the roots of trees. Never plant roots of Peonies deep in the soil for they will grow but little and seldom bloom. We never cover the buds or eyes more than three inches as this is sufficient.

About fertilizing—you have been previously advised to apply manure in the winter. This is not the best practice but to apply it during the summer or growing season. Well rotted manure or compost will not injure even in the winter but fresh manure may do so. Bone meal, too, is a fine fertilizer.

Plant them along the walks, in the perennial border, in beds, in front of shrubs or anywhere and they surely will repay you for space they occupy.

WHITE PEONIES

Baroness Shroeder. A very delicate flesh pink, fading to white with suggestion of heliotrope and gold. Midseason.

Festiva Maxima. The grandest of the whites. Early. The flowers are extra large, color a pure white save carmine tipped petals.

Couronne d’O. 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. Early.

Marie Jacquin. This is almost single, having only double row of outer petals. A favorite with everyone. Midseason.

RED PEONIES

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

PEONIES, FESTIVA MAXIMA

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

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

Officinalis rubra. Rich, dark crimson. This is the old fashioned extra early red and still very scarce.

PINK PEONIES


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

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

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

Livingstone. Late; clear pink. Very fine.

Marguerite Gerard. Another delicate pink, midseason, of great vigor and size.

LaPerle. Deep lilac white, blush center flecked carmine. Medium sized rose type and fragrant.

Mons Jules Elie. Large compact, lilac-rose with lighter pink base petals. Fragrant. Early to midseason.

Venus. Pale hydrangea pink, large, compact crown. Midseason.

SINGLE PEONIES

Alba Flora. Extra large single—five broad petals radiating from center of gold. Bright yellow stamens.

CLIMBING and CLINGING VINES
Lend Charm to Any Home

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.

AMPELOPSIS
A. Englemannii—IMPROVED VIRGINIA CREEPER. Valuable for covering old fences, etc. Leaves red in fall.
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.

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. Jackmani. Large purple.
C. Andre. Large red.
C. Henryi. Large white.
We import our stock of these.
C. paniculata. The small white, sweet-scented varieties that are beautiful both in foliage and blossom.

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.

HONEYSUCKLE—LONICERA
Honeysuckle. 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.

KUDZU VINE. Pueraria Thunbergiana. 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. radicans. 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. Scarlet flowers.

Wistaria. A rampant clinging vine that has the robust vigor of a wild grape and matchless beauty of a rare exotic. Colors both white and purple.
ROSES—THE QUEEN of FLOWERS

After years of breeding, experimentation and testing, rose varieties have advanced many steps beyond the garden of our grandmothers, so wonderful in June. Now we may have a succession of bloom all through the growing season, in colors and shades to suit every fancy. They 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 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 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, chafers, slugs and beetles, use arsenate of lead. For aphids or leaf hopper use kerosene emulsion or if diseases, leaf spot or mildew, use bordeaux mixture. Potassium sulphide, one ounce to three 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 follow 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 make 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 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 Marlitt, H. P. This rose promises to succeed
larger than any of its color. Toplitz 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 all aery 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 ever-
blooming 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 it is 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 its being the most
popular hardy perpetual grown. Because of its
vigor of bush and pleasing color, large size and
comparative freedom from thorns there is an
unprecedented demand for it all ways. It is clear
rose pink, sometimes called pink American Beauty, which
it resembles much in form and color.

Pink Cochet. H. P. 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 slivery rose
pink. Blossoms very double. Plant it, it won't disappoint.

Radiance. H. T. This is a brilli-
ant rosy-carmine with decid-
ed opaline tints in open flower.

CLIMBING ROSES

American Pillar. Flowers large
and single; range from 2 to 3
inches in width. Brilliant
carmine-rose with cream vari-
atons 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.

Christine Wright. A delightful clear, deep pink
with glossy, healthy foliage. One of the best.

Climbing American Beauty. This is a wonderful
new rose resembling its namesake in char-
acter and size of bloom. In color it is a deep pink
not so dark as the bush form.

Dorothy Perkins. This variety is one of the most
popular climbing rose today. 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. 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 to-
today. A radiant crimson in
color, borne in great clusters
from almost every bud. Out-
grows other climbing roses,
usually, and almost immune
to disease.

Gardenia. This is a Wichuraiana
or memorial rose. Very desir-
able for covering graves, rock
walls or stumps. Color in bud
a pleasing bright yellow, open-
ing double cream color.

Paul's Scarlet. This new rose is the
finest red climber intro-
duced. Vivid scarlet, shaded
red, semi-double, retains
color till they fail. Vigorous
grower.

Silver Moon. Another new rose
that has made a name for it-
self. Flowers cup-shaped and
largest of all the climbers.
Semi-double and pure white
with a cluster of beautiful yel-
low stamens in center.

ROSES, BEST FOR CUT FLOWERS
FRUIT DEPARTMENT

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 produced 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 expensive but great harvests follow proper cultural methods.

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

PLANNING THE ORCHARD

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 midseason 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 too 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 so many growers reject, 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. Peaches especially are recommended though plums, some varieties of apples, and cherries, may be used.

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”, no further attention given.

PLANTING THE ORCHARD

Planting. Read carefully “Planting Instructions” on page 4 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 intercrop, 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.

(Continued on Next Page)
PEACHES
Are Profitable and Popular

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 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.

EARLY RIPENING


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 to August 1.

Belle Georgia (Free). White with decided blush; excellent quality; heavy and regular bearer. In this variety we have the best white-fleshed peach for home or market. August 5.

Brackett (Free). Orange-yellow mottled and blushed plumlike. Large, quality the best. Really is a late Elberta and should be in every orchard. August 25.

Carman (Free). White with red blush. Carman is extra hardy, bears every year, and when it fails all else fails, too. Tree a 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. Aug. 10.

Champion (Free). White fleshed, with attractive red cheek, juicy, good quality and dependable. August ripening.

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 that more than 80 per cent of commercial plantings are of this variety speaks well enough for it. August 15.

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.

LATE RIPENING

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, firm, juicy peach of most pleasing flavor. 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.

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 may 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 with some instructions, bulletins and further information may be had on inquiry.

FRUIT DEPARTMENT (Continued from Page 36)

Pruning. For initial pruning, note "Planting Instruction" on page 4, and also the information in planting leadets 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.
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 to 8 inches.

**EARLY APPLES**

**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 home orchards.

**FALL APPLES**

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

**Greening.** Very large green apple ripening in September. Tree very healthy and vigorous and regular bearer.

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

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

**WEALTHY APPLE**
Winter Banana. With us really a full apple ripening in September and should be used before Christmas. Of unusually good quality. Yellow with attractive blush.

“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, subject to rot in humid seasons.

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.
PEARS

The DELIGHTFUL EATING FRUIT

The Pear thrives in a rich deep soil and when given good attention 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 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. The greatest enemy of the pear is the Blight and from present indications will eradicate this fruit until some successful control method is discovered. We suggest very limited or no planting. The disease usually starts at the ends and these branches wither and die. Cutting beyond the black mark, burning the wood and disinfecting the pruning tools is suggested. Spraying helps but does not control the disease.

AT PLANTING TIME: prune to 3 to 5 well developed branches distributed evenly about the main stem. Shorten these to 6 or 8 inches.

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 1st. 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 earlyness and freedom from blight we consider it very valuable. The tree is a decidedly upright grower and productive of large crops in a few years after planting.

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.

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.

KIEFFER PEARS

THEY ALL SAY THE SAME

Owensboro, Ky.  I received the trees, etc., in excellent condition and I want to say it was the most satisfactory order I ever had filled.  
MRS. S. R. E.
Hamilton, Ohio.  I am delighted with my nice shrubs and the very generous supply.
MRS. A. W. W.
The CHERRY
A FRUIT of MANY USES

Cherries succeed only in the drier soils, preferring types that are porous or stony to the low and heavy kinds 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 our 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.

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 redens 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 harder.

May Duke. This ripens a little earlier than the preceding variety and while not quite so vigorous in tree, the fruit is slightly 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 fine. 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.

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.

Yellow Spanish. This is a later variety than any of the preceding. Its large yellow, firm and high-quality 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.

THE PERSIMMON

The Persimmon—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.

QUINCE

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 been by far the best for us.
THE PLUM
FOR MARKET AND HOME USE

The Plum demands a rich soil and additional fertility given after a few years proves beneficial. The trees usually are planted about 25 ft. 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 overbear 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. See spraying calendar or instructions. 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.

The borer, similar to the one that attacks peaches, is also found. Scrapping is the only practical way to eliminate it.

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.

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 is 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 makes it a standard of excellence by which the others are judged. The tree is a moderate grower but healthy.

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. Being an American-Japanese hybrid, it inherits the hardiness and productivity from each parent and produces great crops of coral fruit that is yellow fleshed 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 productivity 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.
**CONCORD GRAPES**

**THE UNIVERSAL FRUIT**

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

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.

**RED GRAPES**

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

Catawba. Standard late red grape that has lost none of its popularity. 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 midseason. 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 vines scarce. Best, extra large.

Wyoming. Bunch and berry small but perfect. A hardy, productive variety of excellent quality.

**BLACK GRAPES**

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

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.
SMALL FRUITS

CURRANTS
The Bountiful Producer

Thrives in deep soil, 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.

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

GOOSEBERRIES

Houghton

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.


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.

STRAWBERRIES
Always productive, always in demand

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 hardly expect to have our usual lot of plants this year owing to lateness of planting in the spring.

DELIGHTED

Frankfort, Ky.

Enclosed you find our check for—which includes my personal invoice and also stock for the club house.

I want to say that we are delighted with the nice evergreens that you sent us. It is always a pleasure to do business with you and the personal interest as well as the selections you always make are especially gratifying.

Enclosed you will find our postcard of the club house. Our salesmen are using these for advance cards. You can well claim this planting as yours.

With kindest regards, we are,

HOGE-MONTGOMERY COMPANY.

By Chas. F. Strossner.
RASPBERRIES
For Every Garden

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 2 1/2-3 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
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 so popular and unsurpassed.

King. Bright scarlet, sweet and melting. This early red is the best of its season because of hardness, 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.

BLACK RASPBERRIES
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 other kind; early, large, productive, round, firm, moderately juicy; a strong grower. Handsome appearance; stands shipping well.

BLACKBERRIES
Prolific and Easy to Grow

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 3 1/2-4 1/2 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.
ASPARAGUS
The GARDENER'S FAVORITE

Asparagus is the earliest and best of all esculent 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 fall 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, spadied 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 his rows five 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 larger grower, but the town man can only keep 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.

RHUBARB

Rhubarb or pie plant is known to everyone. Planted 1½ feet 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.


SAGE

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

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 catalogue.

HORSERADISH

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

August 8th, ’24,

Messrs. H. F. Hillemyer Sons,
Lexington, Ky.

Gentlemen:
I have intended for some time to write you regarding our fall 1923 order. We purchased 874 apples, 2400 peaches, 50 pear, plum and cherry, 1500 grapes, 2000 raspberries, and 2000 blackberries. I went over our planting the past week and found to my surprise that we have not lost a single tree or grape vine. I measured the growth on several trees, the cherries show a growth of 40 inches and the plums 4 feet and over. I think this is very remarkable, especially our not having lost a single tree.

Yours very truly,

FORDSON FARMS, Ransom, Ky.
(Signed) R. L. CULLIN, Supt.
SPRAYING GUIDE

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 probosces or beaks that they sink into the tissues and suck out the sap. Scale or Aphids 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 conical 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 3 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, ½ pound; Hot Water, 1½ gallons. Stir until well dissolved in hot water. Remove it from fire and pour in kerosene while still hot. Churn and pump into itself until a cream 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. Slate 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, mildews, molds, etc., this is effective.

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

Self Boiled Lime Sulphur.—8-8-50. Slate 8 lbs. of the best stone or pulp 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 lime in 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 gallons of spray material.

---

ORCHARDIST SPRAYING CALENDAR
Recommended By Kentucky Experiment Station

SPRAYING APPLES

<table>
<thead>
<tr>
<th>Spray for</th>
<th>Time to Apply</th>
<th>What to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. San Jose scale.</td>
<td>Dormant season; best time, just before leaf buds open.</td>
<td>Standard lime-sulphur, 1 gal. to 8 gals. water</td>
</tr>
<tr>
<td>2. Apple scab.</td>
<td>Just before blossoms open; when showing pink color.</td>
<td>Scaleide or equivalent</td>
</tr>
<tr>
<td>3. Apple worm.</td>
<td>When blossoms have fallen.</td>
<td>Lime-sulphur ¼ gals. to 50 gals. water. Nicotine sulphate ½ pint added to above if anhise is present.</td>
</tr>
<tr>
<td>4. Apple blotch. apple scab.</td>
<td>Two weeks after blossoms fall.</td>
<td>Lime-sulphur ½ gals. to 50 gals. water and ¼ lbs. arsenate of lead powder.</td>
</tr>
<tr>
<td>5. Codling moth.</td>
<td>Two weeks after Spray No. 4.</td>
<td>Bordeaux mixture 3-4-50, 1¼ lbs. arsenate of lead powder.</td>
</tr>
</tbody>
</table>

SPRAYING PEACHES AND PLUMS

<table>
<thead>
<tr>
<th>Spray for</th>
<th>Time to Apply</th>
<th>What to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. San Jose scale.</td>
<td>Dormant season.</td>
<td>Commercial lime-sulphur, 1 gal. to 8 gals. water.</td>
</tr>
<tr>
<td>2. Curriculo.</td>
<td>After blossoms fall.</td>
<td>Scaleide</td>
</tr>
<tr>
<td>3. Peach scab.</td>
<td>2½ to 3 weeks after Spray No. 2.</td>
<td>1 lb. arsenate of lead powder, 1 lbs. lime, 50 gals. water.</td>
</tr>
</tbody>
</table>

---

47
<table>
<thead>
<tr>
<th>Page</th>
<th>Page</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abelia</td>
<td>12</td>
<td>Funkia</td>
</tr>
<tr>
<td>Abies</td>
<td>5</td>
<td>Guillardia</td>
</tr>
<tr>
<td>Acer</td>
<td>23</td>
<td>Geum</td>
</tr>
<tr>
<td>Adam's Needle</td>
<td>30</td>
<td>Ginkgo or Salsburia</td>
</tr>
<tr>
<td>Aesculus</td>
<td>21</td>
<td>Golden Bell</td>
</tr>
<tr>
<td>Almond</td>
<td>12</td>
<td>Golden Glow</td>
</tr>
<tr>
<td>Althea</td>
<td>12</td>
<td>Gooseberries</td>
</tr>
<tr>
<td>Amelanchier</td>
<td>33</td>
<td>Grapes</td>
</tr>
<tr>
<td>Ampelopsis</td>
<td>12</td>
<td>Grasses</td>
</tr>
<tr>
<td>Anthocyanin</td>
<td>12</td>
<td>Gum</td>
</tr>
<tr>
<td>Anemone</td>
<td>28</td>
<td>Gymnocalclus</td>
</tr>
<tr>
<td>Anchusa</td>
<td>33</td>
<td>Gypsophila</td>
</tr>
<tr>
<td>Arbutus</td>
<td>12</td>
<td>Haemoracails</td>
</tr>
<tr>
<td>Asparagus</td>
<td>38-39</td>
<td>Halesia</td>
</tr>
<tr>
<td>Arundo</td>
<td>28</td>
<td>Hamamelis</td>
</tr>
<tr>
<td>Apple</td>
<td>28</td>
<td>Hedge Plants</td>
</tr>
<tr>
<td>Alegria</td>
<td>25</td>
<td>Hedera</td>
</tr>
<tr>
<td>Aralia</td>
<td>15</td>
<td>Helianthus</td>
</tr>
<tr>
<td>Aster-Viteae</td>
<td>7</td>
<td>Hibiscus</td>
</tr>
<tr>
<td>Arundo</td>
<td>19, 20</td>
<td>High Bush Cranberry</td>
</tr>
<tr>
<td>Arundo</td>
<td>46</td>
<td>Holly</td>
</tr>
<tr>
<td>Asparagus</td>
<td>29</td>
<td>Hollyhocks</td>
</tr>
<tr>
<td>Asparagus</td>
<td>12, 13, 26</td>
<td>Hicoria</td>
</tr>
<tr>
<td>Asian Maple</td>
<td>33</td>
<td>Honey suckle, Bush</td>
</tr>
<tr>
<td>Asparagus</td>
<td>33</td>
<td>Honey suckle, Vine</td>
</tr>
<tr>
<td>Azalea</td>
<td>31</td>
<td>Horse Chestnut</td>
</tr>
<tr>
<td>Blackberries</td>
<td>45</td>
<td>Horseradish</td>
</tr>
<tr>
<td>Blanket Flower</td>
<td>29</td>
<td>Hydrangea</td>
</tr>
<tr>
<td>Bleeding Heart</td>
<td>24</td>
<td>Hypericum</td>
</tr>
<tr>
<td>Boxwood</td>
<td>8</td>
<td>Ivy</td>
</tr>
<tr>
<td>Bridal Wreathe</td>
<td>18</td>
<td>Lec</td>
</tr>
<tr>
<td>Buddleia</td>
<td>13</td>
<td>Indian Currant</td>
</tr>
<tr>
<td>Butterfly Bush</td>
<td>20</td>
<td>Iris</td>
</tr>
<tr>
<td>Butternut</td>
<td>20</td>
<td>Japanese Bellflower</td>
</tr>
<tr>
<td>Calycanthus</td>
<td>8</td>
<td>Japan Cypress</td>
</tr>
<tr>
<td>Campanula</td>
<td>29</td>
<td>Japan Quince</td>
</tr>
<tr>
<td>Canterbury Bell</td>
<td>21</td>
<td>Japonica</td>
</tr>
<tr>
<td>Carnations</td>
<td>25</td>
<td>Jet Bead</td>
</tr>
<tr>
<td>Catalpa</td>
<td>20, 21</td>
<td>Juglans</td>
</tr>
<tr>
<td>Cercis</td>
<td>24</td>
<td>Juniper</td>
</tr>
<tr>
<td>Chamaecyparis</td>
<td>9</td>
<td>Juniperus</td>
</tr>
<tr>
<td>Chrysanthemums</td>
<td>32</td>
<td>Kentucky Coffee Tree</td>
</tr>
<tr>
<td>Chrysanthemums</td>
<td>13</td>
<td>Kerria, White</td>
</tr>
<tr>
<td>Chrysanthemums</td>
<td>33</td>
<td>Koelreuteria</td>
</tr>
<tr>
<td>Clematis</td>
<td>33</td>
<td>Kudzu</td>
</tr>
<tr>
<td>Clematis</td>
<td>29</td>
<td>Lactuca</td>
</tr>
<tr>
<td>Columbine</td>
<td>29</td>
<td>Cranberry</td>
</tr>
<tr>
<td>Coreopsis</td>
<td>12</td>
<td>Grape Myrtle</td>
</tr>
<tr>
<td>Cotoneaster</td>
<td>13</td>
<td>Currants</td>
</tr>
<tr>
<td>Coyonie</td>
<td>16</td>
<td>Cyngen</td>
</tr>
<tr>
<td>Cygness, Japan</td>
<td>9</td>
<td>Deciduous Shubs</td>
</tr>
<tr>
<td>Deciduous Trees</td>
<td>12-24</td>
<td>Deutzia</td>
</tr>
<tr>
<td>Delphiniums</td>
<td>29</td>
<td>Dicentra</td>
</tr>
<tr>
<td>Deutzia</td>
<td>14</td>
<td>Dicentra</td>
</tr>
<tr>
<td>Diervilla</td>
<td>18</td>
<td>Digitalis</td>
</tr>
<tr>
<td>Dogwood</td>
<td>14, 15, 21</td>
<td>Dogwood</td>
</tr>
<tr>
<td>Elder</td>
<td>15</td>
<td>Elder</td>
</tr>
<tr>
<td>Elm</td>
<td>21</td>
<td>English Ivy</td>
</tr>
<tr>
<td>Euonymus</td>
<td>16</td>
<td>Euonymus</td>
</tr>
<tr>
<td>Evergreens</td>
<td>16</td>
<td>Evergreens</td>
</tr>
<tr>
<td>Exochorda</td>
<td>13</td>
<td>Exochorda</td>
</tr>
<tr>
<td>Fagus</td>
<td>20</td>
<td>Fagus</td>
</tr>
<tr>
<td>Fir</td>
<td>21</td>
<td>Fir</td>
</tr>
<tr>
<td>Flowering Almond</td>
<td>12</td>
<td>Flowering Almond</td>
</tr>
<tr>
<td>Flowering Crab</td>
<td>13</td>
<td>Flowering Crab</td>
</tr>
<tr>
<td>Forsythia</td>
<td>13</td>
<td>Forsythia</td>
</tr>
<tr>
<td>Foxglove</td>
<td>29</td>
<td>Foxglove</td>
</tr>
<tr>
<td>Fraxinus</td>
<td>23</td>
<td>Fraxinus</td>
</tr>
<tr>
<td>Fruits</td>
<td>26-46</td>
<td>Fruits</td>
</tr>
</tbody>
</table>

The L. W. RAMSEY, Company, Davenport, Iowa

Copyright 1925