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SPECIAL SHRUB AND PLANTING NUMBER

Meehan's Garden Bulletin

MARCH, 1911

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A LIFE-LIKE BLOSSOM OF MEEHANS' MALLOW MARVELS
(One-fourth size—for description see next page)

Published Monthly
by **THOMAS MEEHAN & SONS**
Nurserymen and Horticulturists Germantown, Philadelphia, Pa.

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The blooming propensities and brilliant floral display to be had from our gorgeous Mallow Marvels may be pictured from this group. Such effects for weeks!

Meehans' Mallow Marvels

—the perennial creation of the century—continue to amaze thousands by the huge size, gorgeousness and abundance of their exquisite blossoms.

From the day, in early spring of 1907, when **Meehans' Mallow Marvels** were first offered to the public until the present day, they have been selling by the thousands.

It took but one season for the horticultural world to realize what a treasure they are. They are acknowledged by the best authorities to be the most exquisite and worthy introduction of the past century.

Meehans' Mallow Marvels are a hardy perennial, coming up from the root each Spring. They are perfectly hardy. Many glowing letters have come from Canada to Florida, and from the Pacific States—all complimentary. Of robust habit, these plants do not suffer from scale or insect troubles; they thrive in a variety of soils.

The real treat, however, comes with the flowers in late July or August. The huge blossoms from 6 to over 10 inches in diameter, 20 to 30 inches in circumference! All to be had in soft shades of pink, glowing, rich red and crimson. We did have white, too, but the supply is exhausted.

Examine the single blossom on the cover of this Garden Bulletin. Realize that the reproduction discounts the actual beauty of the flower and you may picture in your mind the

wonderful effects of a huge bush, clustered full of these vivid blossoms, such as is portrayed above.

Such flowers for one short week would indeed be well worth the cost and labor, but these exquisite blooms continue to come for weeks, often until checked by autumn frosts. Not only did we produce and first offer for sale these wonderful plants, but since then have been perfecting certain shades and forms. Be sure therefore to send orders direct to us and get the **true** and best forms. There are some seedling forms of inferior quality now on the market.

Let us have your order **early**. We don't want to disappoint anyone, but our supply of some colors is limited.

BIG TWO-YEAR ROOTS. Right away, this summer, you will get results from these big, heavy roots. Pink, Red or Crimson Shades.

75 cts. each	25 for \$12.50
5 for \$3.00	250 for 93.75

EXTRA-SIZED ROOTS. You may want an exceptionally heavy bush this season, and in such a case order this grade.

\$1.00 each	25 for \$ 16.25
5 for \$4.00	250 for 125.00

THOMAS MEEHAN & SONS
Germantown, Phila., Pa.

An abundance of bloom is always in the hardy garden from the time the iris flowers until—

\$10.00 Hardy Garden

There are 129 very fine perennials, many new and some favorite roots, all in good flowering size. There is \$13.00 worth at least in this group.

We know that no collection could surpass this one at the same price.

This collection will very nicely plant 175 square feet.

- 4 Sweet Williams
- 4 Silver King Iris
- 4 Josephine Iris
- 5 Hardy Phlox
- 5 English Larkspur
- 3 Dahlias (assorted)
- 4 Purple Cone Flowers
- 4 Hardy Asters
- 5 Dwarf Variegated Grass
- 5 Hardy Chrysanthemums
- 3 Bronze Day Lily
- 3 Evening Primroses
- 3 Pink Starwort
- 5 Bellflowers (assorted)
- 4 Yellow Coreopsis
- 3 Scarlet Bergamot
- 3 Blue Baptisia
- 4 Scotch Pinks
- 3 New Red Helenium
- 4 Blue Day Lily
- 3 Stokes' Asters
- 4 White Perennial Spiraea
- 4 Blue Speedwell
- 3 Thermopsis Caroliniana
- 4 Hardy Corn Flowers!
- 10 Sisyrinchium—Blue-eyed Grass
- 1 Mallow Marvel, 2 year (give ample room)
- 2 Double Paeonies (mixed colors)
- 120 Groff's Hybrid Gladioli (mixed)

Plenty of Flowers from Spring till Fall

The owner of a well-selected collection of perennials secures pleasure from a constant supply of blossoms, from early Spring until late Autumn.

At the same time they are the result of little care and continue from year to year to give increasing returns with only the initial cost. Where perennials were grown by the hundreds ten years ago they are now raised by the thousands.

In all America there is not a better all-round collection than ours and few to equal it.

Into our famous **Hardy Garden Collections** go the best we grow, selected to give a variety of *color* and *bloom*, over as broad a season as possible. These collections are not only carefully made up, but at the price offered are decidedly reasonable.

Let us have your orders early—you'll be better pleased with plants set out in advance of any growth.

\$5.00 Hardy Garden

Into this collection go 56 of our choicest perennials and roots, of good size and sure to produce satisfactory results this season.

Take this collection and buy the plants anywhere, and for the same quality in selection and stock you would pay at least 20 per cent more.

Here is a selection; judge yourself of its value:

- 2 Old-fashioned Hardy Chrysanthemums.
- 2 Double Paeonies (mixed colors)
- 2 Hardy Yellow Coreopsis
- 3 Blue Speedwell
- 3 Sweet William (mixed colors)
- 3 Silver King Iris or Flag
- 4 Hardy Phlox
- 2 Dahlias (assorted colors)
- 10 Gladioli (mixed colors)
- 2 Hardy Aster Tataricus
- 3 Purple Cone Flowers
- 10 Dwarf Variegated Grass
- 3 Single Mixed Hollyhocks
- 2 New Red Helenium
- 3 Improved English Larkspur
- 2 Bellflowers

—the hardy Chrysanthemums defy Jack Frost in the Autumn.

Thomas Meehan & Sons
Germantown
PHILADELPHIA, PA.

Write to Meehan for Garden Help

YOU can get the best kind of a gardening help from us and you may depend upon it as it is the result of fifty-seven years of plant association and experience.

You may feel that the problem you have before you is too trifling to write us about but you will find us ready to help you about any garden matters, large or small:

To give you an idea of the scope of work covered by this establishment let us cite a few of the many questions that are being daily put to us at this season of the year.

"Can you tell me what kind of shrubs to put in the bed which is directly in front of our bay window. I'll enclose a rough sketch giving size and location." We told this woman what she should have and named a sum for supplying a given list of stock and furnishing her with a plan by which to plant it.

"I have a steep bank on my property where I have trouble in getting anything to grow as it is hot and dry. Will you please tell me the best plants for such a situation?" This was quickly and satisfactorily answered, as we received the order and our customer was satisfied.

"I have a formal garden and wish more bloom in the month of June. Can you give or suggest a good list of perennials in addition to these I send you?" We were able to send quite a long list from which this man can make a selection.

"Please tell me what plants you have that would be suitable for edging a woodland which I have on my property. I want something that will harmonize with the natural plants which are there now." We were able to name a good list for this purpose, as we know what grew in that section of the country.

It does not matter how large or small your proposition may be, we will welcome a note from you that we may assist you in making your grounds entirely successful. Do not think a letter to the house will be handled automatically. This establishment is founded on a different basis.

We have the country divided into geographical sections, and each gets the personal oversight of a manager who does nothing else but study that one locality.

An inquiry from Connecticut comes before Mr. Wilcox, one from Virginia to Mr. Hemming, one from Ohio to Mr. Pond and so on, all under the daily supervision and advice of Mr. S. Mendelson Meehan.

The six managers looking after these territories are experienced and well informed and can give you this special Meehan-service to your decided advantage.

With plans matured, early orders insure quick delivery in the early Spring and the plants reach these far-sighted buyers about the time others are planning.

Write us about any garden problems you have; tell us particulars, and if you have any photographs showing exact conditions send them along. We will insure to you careful consideration of your problem and the advice we give need not obligate you to favor us with orders.

Write us soon—at once—and get your plans outlined. Spring slips by before we realize it.

SPECIAL—Our Spring Price List is ready, and we'll gladly send you a copy if you ask for it.

Thomas Meehan & Sons

Germantown, Philadelphia, Pa.

Meehan's Garden Bulletin

VOL. 2
Subscription 50 Cents a Year

MARCH, 1911

No. 7
Single Copies 5 Cents

Special Feature Shrubs for Solitaires, Formal Positions, Prominent Groups and Beds

EDWIN MATTHEWS.

WHENEVER the treatment of new grounds is under consideration, shrubs invariably occupy the major portion of the scheme, so adaptive are they to the many situations and demands made on them.

And how varied are these demands, but whether the plan calls for high, medium or dwarf effects, color schemes in flower, foliage or fruit, there are shrubs in variety to meet these requirements.

To the small garden owner, as well as to those whose estates cover many acres, "Special Feature Shrubs" will appeal alike.

It is not every place that will allow of the massing of shrubs, but for a few with some distinguished attributes there is room, however small the grounds.

In these notes it is our desire and purpose to speak briefly of those which, for some particular feature they possess, will appeal to the reader and perhaps help him in making a wise and interesting selection.

Solitaires.

As is implied, in this case the shrub will occupy a certain position unaccompanied by other plants.

It is not every plant that possesses a combination of good qualities fitting it for such a position. There are, however, some shrubs that, while they are decorative in conjunction with others, appear to better advantage and are far prettier when standing alone.

In this position they develop into graceful speci-

mens and give us an idea of what they are capable of at maturity.

Here are a few that we consider worthy of standing alone when such a position is desired to be filled:

Forsythia viridissima AND *Fortunei*.

Nearly every one knows the *Forsythia* under the most appropriate name of "Golden Bell," and it is seen in most collections of shrubs.

Not often, however, is it used in the capacity of a solitary specimen. When it is it forms a most delightful sight. The rich yellow flowers preceding the leaves fairly envelop the plant, forming a conspicuous feature that may be seen from quite a distance.

It retains its foliage, too, in good condition throughout the whole season.

Viridissima is rather upright, and the other gracefully spreading.

Deutzia crenata IN VARIETY AND *D. Lemoinei*.

Ever popular is the *Deutzia* in its several varieties. Under the most adverse conditions will it give a fair show of flowers, but give it a position where it has room to develop and you will be amply repaid for the space in an abundance of bloom.

Where tall plants are wanted use the *crenata* type.

D. Lemoinei, being of medium height, is specially suited for restricted spaces or planting on high ground, like the summit of a terrace, etc.

Spring is heralded by the bright yellow display of the Golden Bell Blossoms. Specimen planting is not to be ignored when results like this are secured.

The majority have white flowers, a few have a tinge of pink in them.

Halesia tetraptera.

This, the "Silver Bell," is not known nearly so well as it should be. Occasionally we see it in the background of shrubbery borders and as a single specimen. In both positions it is very desirable. Its bell-shaped flowers are strung pendant-like along the underside of the branches.

It grows into a tree-like shrub 10 to 12 feet high.

Styrax Japonica.

Not unlike the above in floral display and general outline is the "Snowdrop Tree."

Its flowers are a chaste white and are very fragrant.

Clean-looking at all times, it makes a valuable plant as a solitaire.

Exochorda Grandiflora.

For the pure whiteness of its flowers this plant is called "Pearl Bush."

Planted in a sunny position, and given ample room, it forms a large spreading specimen. Blooms in May.

Magnolia stellata.

Usually Magnolias occur in our thought as trees, but in *M. stellata* we have a neat little shrub-like plant, most suitable for prominent, but sheltered, positions, where its chaste, star-like blossoms are in no danger of being blasted by cold winds that sometimes occur in April.

Lonicera, BUSH HONEYSUCKLE.

Some of these make imposing subjects for specimen planting. They have a two-fold beauty in that the sweet-scented flowers, which are yellow, white and pink, are followed by a rich display of red or yellow berries. These ripen during the summer and, provided the birds do not strip them, the fruit remains on the plant for a considerable time.

The best varieties are *L. orientalis*, *Morrowi*, *Ruprechtiana*, *Tatarica* and *grandiflora*. The latter bears larger flowers than any of the others.

Philadelphus IN VARIETY.

The Mock Orange, or Sweet Syringa, will always remain a favorite, principally for the wealth of fragrant flowers they give in the early days of June.

While the old variety *coronarius* will have preference with most people on account of its sweet fragrance, *grandiflora* finds favor with many for its larger flowers and more careless grace.

P. Lemoinei is a neat little plant, not making such strong growth as the former two, but the flowers are probably more numerous and emit a lemon fragrance.

Few there are who know what grand results are to be had by using the Bush Honeysuckles. Just study these handsome specimens.

Massing or solitaire planting does not detract from the wonderful beauty of *Spiraea VanHouttei*.

Syringa, LILAC.

Speaking of fragrance in flowers our thoughts instantly revert to the Lilac.

There are few flowers more intimately associated with the public than those of the Lilac.

They are as much a guide to the season of the year as the calendar, for the odorous blossoms are found everywhere, and then we know that spring is with us.

Lilacs, as a family, like a well-drained and sunny situation.

Syringa Persica and *Rothomagensis* must receive the highest points for grace and quantity of flowers, but the old-fashioned kind—*vulgaris*—and its many varieties still have a premier place for fragrance and size of flower.

Spiraea IN VARIETY.

For the acme of grace turn to the *Spiræas*, among which the varieties *S. prunifolia*, *S. Van*

Houttei, *S. Thunbergii* and *S. arguta* stand out prominently.

Any and every one of the four mentioned are admirable subjects for solitaires.

They should have ample room to develop the spreading and pendulous branches, for their height of beauty is only reached when the arching shoots are allowed to grow unfettered. Then they will dispose themselves in the most graceful manner.

Weigela IN VARIETY.

Keen rivals to the *Spiræas* are the *Weigelas*. All the kinds when planted as lawn specimens are very pleasing.

The plants in bloom are regular fountains in color, the arching branches meeting the green sward with a finished touch.

In the seven or eight varieties of *Weigelas* we have flowers of pure white, light and dark pink, red and crimson.

The Weigelas seem to be shrubs for every one, as their blossoms come in white, pink, red and crimson.

Ligustrum Regelianum.

This fine dwarf shrub, while not possessing real floral attraction, has good points to bring it to the front as suitable for specimen planting.

It assumes lovely form when allowed to grow naturally. Its leaves remain a bright green when others are in the sere.

Viburnum IN VARIETY.

Some of the *Viburnums* must be included in this list, not only for their floral display, but for the additional charm they have in leaf and berry.

The best ones in point of flower are the two sterile or double forms, *V. opulus sterilis* and *V. plicatum* (Japanese Snowball).

Two others, *V. tomentosum* and *V. Sieboldi*, though less regal in flower, make it up later in the season in berry display. The foliage of the former turns a reddish bronze in autumn, that of the latter is an unusual lustrous green, and is always much admired.

Formal Positions.

Not many shrubs are naturally formal in shape and outline. They are, however, sometimes made so by artificial treatment.

The nurseryman, realizing that there is always a call for such, has (shall we say) manufactured them.

Thus we have now at our command a number of shrubs that have an air of artificiality about

them, and used, for instance, in the formal garden, along and near paths or drives, terrace gardens, positions near the house itself, or places of a like nature where plants are sought to accentuate the idea of formality.

STANDARD OR TREE-FORM SHRUBS.

This list consists of those plants, which, under the hand of the nurseryman, have been made to assume a more or less formal appearance, and which must, without exception, have yearly treatment by careful pruning and the shortening in of the more vigorous shoots, which, in the case of

The old-fashioned Mock Orange or Sweet Syringa. Get the variety *Lemonei* for heavy fragrance.

Privet, will amount to clipping to have them maintain that neat appearance which is essential.

Snowballs—

Viburnum plicatum,
“ *tomentosum*,
“ *opulus sterilis*,
“ *Sieboldi*.

Privet—

Ligustrum ovalifolium.

Hydrangea—

Hydrangea paniculata,
“ *paniculata grandiflora*.

Rose of Sharon, or Althæa—
Hibiscus.

Lilac,
Spiræa opulifolia,
Tamarix,
Tree Rose.

In addition to the foregoing we can name possibly a half dozen shrubs which are semi-formal in habit, and which can be made fully so with but a little trimming with the shears now and again, and with the additional advantage that this trimming does not completely spoil their chances of flowering.

COMPACT SHRUBS.

Three neat little plants are *Deutzia gracilis*, *Berberis Thunbergii* and *Spiræa Anthony Waterer*, which, with but an occasional shearing, can be made to fit many a formal position, and at the same time produce quite a display of bloom in their season.

Two other shrubs which are very amenable to this treatment are *Pyrus Japonica* and *Stephanandra flexuosa*. The former, even when kept within severe restrictions, is fairly covered with bloom in early spring.

It is needless to mention the California Privet, so well-known is it and so often used in ball, dome and globe-shape in many gardens.

Prominent Groups and Beds.

How to group to attain the best effect is by no means a simple matter, so much depends on all surrounding conditions.

That not enough thought is given to this is plainly evident in the glaring errors too often seen in gardens.

Many of our most beautiful flowering shrubs are often planted in such a manner as to suggest that the only object of the planter was simply to crowd as many as possible into a given space, with not a thought to the future welfare or appearance of the plants.

If, however, the grouping of shrubs be attended with some forethought, and the practice of it carried out with good taste, there is no phase of gardening that would add more to the beauty of the home grounds.

Positions of more or less prominence are lawn groups, lawn corners, porch beds, entrance gate planting, corners of buildings and other situations of like prominence. Circular and elliptical beds may also be included.

As there are shrubs which only show their real worth when seen standing alone, so there are some that would look insignificant and forlorn unless in company with others.

The pure white flowers of *Deutzia gracilis* are as delicate as the Lily-of-the-Valley. The taller growing forms are equally as valuable for planting.

A suggestive plan for setting the plants listed under porch bed—Example 1.

For positions like those named above, however, we may call into use practically the whole list of deciduous foliage and flowering shrubbery.

PORCH AND PORTCOCHERE PLANTING.

For these positions there is a continual call for plants of a permanent character that will make a pleasing setting to the house.

It goes without saying that for an all-year-round appearance evergreens must have precedence.

However, a wise selection of shrubs well-placed will prove pleasing to many, and at a considerably less expense.

PORCH BED EXAMPLE (1), 14 PLANTS.

Berberis Thunbergii,
Symphoricarpos vulgaris,
Symphoricarpos mollis,
Spiraea Thunbergii,
Desmodium penduliflorum,

Deutzia gracilis,
Spiraea Anthony Waterer,
Azalea Pontica,
Azalea Mollis,
Caryopteris Mastacanthus,
Stephanandra flexuosa,
Ligustrum Regelianum,
Cercis Japonica,
Hypericum prolificum.

LAWN GROUPS.

As these are usually seen from all sides they should be selected with care and be of the specimen type of shrub, imposing, yet graceful.

EXAMPLE (2), GROUP OF 5 PLANTS.

Viburnum plicatum,
Viburnum tomentosum,
Spiraea prunifolia fl. pl.
Weigela amabilis,
Hydrangea paniculata grandiflora.

EXAMPLE (3), GROUP OF 3 PLANTS.

Lonicera Tatarica grandiflora,
Spiraea Van Houttei,
Weigela amabilis variegata.

LAWN CORNERS AND CORNERS OF BUILDINGS.

In selecting shrubs for either of these positions we have the liberty to use plants of different heights and types of growth, the whole to be disposed and to fit into a given space in the best possible manner without crowding.

EXAMPLE (4), GROUP OF 7 PLANTS.

1 *Hibiscus Syriacus*,
1 *Syringa vulgaris*,
2 *Hydrangea paniculata grandiflora*,
1 *Forsythia viridissima*,
1 *Weigela Eva Rathke*,
1 *Spiraea Van Houttei*.

Early spring finds the scarlet flowers of the Fire Bush, *Cydonia* or *Pyrus Japonica*, in full bloom.

(CONTINUED ON PAGE 37)

A suggestion for screening the sharp base lines of a house. What a pleasing picture to the eye of the artist and the inexperienced planter as well.

Shrubs for Screening

RAYMOND POND.

A screen may be used to definitely shut out from view some feature that is not pleasing, or it may be to intercept the view by a veiling spread of foliage. It often adds to the effect to halt the eye at a point before it traverses the extent of the view, as at a turn in the road, on the bank of a stream or lake, or wherever complete privacy is not the essential, but a foliage-mass is needed for contour effect or to hold the eye for an instant.

A group of one subject may be used or a variety. The circumstances should decide. At times the screen might amount to no more than a tall hedge with a wall of green, the principal feature other than that of screening. In this case the Privets are splendid subjects. They adapt to many different conditions and furnish a luxuriant growth of good green. Bush Honeysuckles are also good, but not so erect nor so vigorous.

Shrubs in variety could not reasonably be planted in a straight line, hedge-fashion. They require more irregular arrangement, apparently careless, with no suggestion of the thought which has actually been given to make a uniform shield

and, as well, to give a pleasing effect as a shrub-mass. In some cases this might amount to only a bed. Again, it might mean a belt of tall shrubs, varying in height as required, consistent with a pleasing contour of the mass as a whole. Smaller shrubs in front are useful, sometimes necessary, to gently merge the taller mass with the ground.

A single specimen shrub is often in itself a screen. A shrub before a window, not too close, often gives the view from indoors an added charm. Picture a Hawthorn in bloom, twigs extending close to the window, the whole bush making a veil of leaf and flower for the window. The Viburnums, Privets or other close-foliaged shrubs should not be used for such a purpose. The charm lies in the free grace of the branches, when observed at so close range; also, the view would otherwise be cut off. The free shrubs, with Hawthorns and Dogwoods as examples, screen without closing the view. Judicious pruning may be employed to make the effect exactly what is desired.

The list of shrubs given here is divided so that a selection may be made for either purpose. A

Just enough spread to the Dogwood to give screening effects without density to mar the beauty of the plant.

few of the shrubs are better adapted for planting in shady spots. If you wish to plant a screen in such a place, or if the screen continues under shade, use the kinds so marked in the list. The approximate ultimate height is given in each case as a guide in the selection. Select the plants marked to mature a little higher than is required.

A SELECTION OF CLOSE-GROWING SHRUBS FOR
MAKING A DENSE SCREEN.

Cornus Mas. Cornelian Cherry (10 to 12 ft.). Broad, bushy shrub, with dense growth of handsome glossy foliage. Yellow flowers appear in clusters before the leaves. Bright, large "Cornelian Red" berries appear later.

Ligustrum. Privet (8 to 15 ft.). (Shade). Four varieties are useful.

L. ovalifolium (California Privet). The commonest is upright, compact and bushy. Foliage good. Is very serviceable and gives quick results.

L. Iboia. Somewhat similar to the above; is much hardier. Should be used in place of *ovalifolium* in the far north and northwest, for either hedge or specimen plantings.

L. Amurensense, evergreen in the South, is the favorite there.

L. Regelianum (Regel's Privet) is smaller than either of the preceding, with spreading picturesque habit.

These Privets bear white flowers in various sized clusters, providing the flowering wood is not cut away.

Hibiscus Syriacus (in variety). *Althæa.* Rose of Sharon; 8 to 10 ft. Erect shrub unless pruned. Bushy, with large handsome Hollyhock-like flowers, some varieties single, the majority double. Flowers appear in late summer, when most welcome. Color ranges from bluish-purple to white, through reds and pinks. One single variety is of a real light blue. Foliage is neat and of splendid dark green.

Philadelphus coronarius. Sweet Syringa; 8 to 10 ft. Upright with arching branches. Creamy white flowers, deliciously fragrant, are borne in May and June. Very showy, but should be carefully pruned to make an effective screen. Quite hardy.

Lindera Benzoin (Laurus). Benjamin Bush. Spice Bush. Fever Bush. (6 to 10 ft.). Shade. A compact bushy shrub with good foliage. The oval leaves take on intense tones of yellow in the fall. Flowers yellow in early spring. Scarlet berries are borne in early autumn.

Corylus Avellana. Hazel. (10 to 12 ft.). Shade. Broad oval leaves. The bushy habit and luxuriance of foliage make a close screen.

Corylus Avellana purpurea (maxima purpurea). Purple Hazel. (10 to 12 ft.). Like the former, but with rich purple-red foliage

Other forms of the Hazel are useful.

Cornus paniculata. Panicked Dogwood. (8 to 10 ft.). Shade. Upright handsome shrub with gray branches. Leaves dull green, whitened beneath. White flowers in short panicle-clusters appear in late May. White fruit is borne on dark-red stems in the fall.

Rhus Cotinus. Smoke Bush. Venice Sumach. (8 to 10 ft.). Compact shrub with rounded leaves. Flowers in early summer, bearing billowy masses of plumey pale-purple bloom, which gives a realistic smoke effect. The foliage assumes brilliant red and yellow tones in the autumn.

Hamamelis Virginica. Witch Hazel. (10 to 15 ft.). Shade. Compact, bushy shrub with handsome foliage, turning yellow and orange in the fall. At this time or sometimes after the leaves fall, the odd but showy yellow flowers crowd the branches.

Lonicera. Bush Honeysuckle. (8 to 10 ft.).

L. Tatarica (Tatarian) has several varieties with different colored flowers and berries. They make bushy, shapely shrubs, and are valued highly for the ornamental red and yellow berries which appear in the fall. The flowers are small but showy.

L. fragrantissima, with creamy white or light yellow fragrant flowers in early spring, is another splendid sort.

L. Ruprechtiana (Manchurian) is a very vigorous variety, attaining 8 to 12 ft. Leaves whitened beneath. Flowers white, changing to yellow in spring. Berries red or yellow.

L. Xylosteum (Fly) flowers in late spring. Blossoms yellowish white. Berries dark red or scarlet.

Viburnum. Arrow-woods and Snowballs. (8 to 12 ft.).

V. dentatum (Arrow-wood) is upright, with bright-green, heartshaped leaves which color in the fall. Flowers creamy white in flat topped clusters in early summer. Berries blue-black. Very symmetrical.

V. dilatatum (Japanese Bush Cranberry) another upright kind, flowers in early summer, with broad, flat clusters of white blossoms. Berries scarlet.

V. Lantana (Wayfaring Tree) is a large growing shrub attaining sometimes 15 ft. Heart-shaped leaves, wrinkled and downy beneath. Flowers white in showy flat clusters. Berries bright-red, changing to black. A splendid specimen plant.

V. Molle (Nepalense) resembles *dentatum*, but the branches, stems and under side of leaves are slightly downy and bloom two or three weeks later. The blue-black berries are handsome.

V. Opulus (*oxycoccus*) (High Bush Cranberry), has a distinct leaf from any of the rest, more like a Maple leaf. The showy flat heads of white flowers appear in May. Large brilliant red berries follow in the autumn.

Variety *sterilis* (Common Snowball) is like the former, excepting in the flowers, and it lacks the showy fruit. All the flowers are sterile, making the flower head a perfect ball. This is almost too well known to need describing.

V. Sieboldi (Chinese) is valued for its handsome dark-green glossy foliage, quite unlike the

(CONTINUED ON PAGE 31)

The Viburnums certainly do become close and compact and for this reason are admirable screening plants.

An effective screen of massed shrubs. Too much variety might be regarded a fault, but it would appeal to the person who desires something blooming all the time.

Shrubs for Massing Purposes and General Border Effects

SAMUEL NEWMAN BAXTER.

The arrangement of shrubs and the distance apart in planting will always admit of discussion, and decisions will be influenced by personal taste.

Just as tastes differ, so will methods vary. The following ways of and reasons for arranging shrubs will enable the planter to adopt the methods best suited to his or her particular conditions.

As a further aid in solving the planting problem no better lesson could be learned than by exercising that most valuable quality—observation. Note the successes and failures of plantations; copy their good points, avoid their weaknesses, and the basic principles will have been mastered. It is the same old story—study your conditions.

A border plantation may be arranged according to two distinct methods—*i. e.*, “massed planting” and “open specimens.”

“Massed planting” is continuous, unbroken, and the shrubs planted so close that they lose their individuality and contribute to the effect as a whole.

“Open specimens” refers to a more open treatment, and the arrangement is along the lines of alternate irregular groups and open spaces. The relative merits of both methods and manner of their construction may be reviewed as follows:

The so-called mass planting is a more recent method and is practised by the professional landscape gardeners to a greater extent than by the novice, for it requires more experience in the

planting. Shrubs are planted two to five feet apart, depending upon their character.

This lavish arrangement amazes the layman, horrifies the prospective purchaser of a "few shrubs," and calls forth storms of protest from the planter who dotes on individual specimens with ample space for their development.

It may be regarded as a "daring" treatment. It does not find favor where a monetary consideration is involved, for the expense is increased by the greater number of plants required and yet, when planned by an experienced hand, the effect is rich and restful; the antithesis of so many of the promiscuously scattered few shrub effects which lend an impoverished air to their surroundings.

But quantity of plants alone does not constitute a good treatment. They must be well arranged. Neither should attempts for showiness and gaudy display be placed paramount to the modest, natural though withal attractive effects. Avoid freaks.

Massed planting is justified and is especially advisable in many cases. For screening purposes and where a dense plantation for immediate effect

is desired, unless the shrubs are planted very close, their purpose is for naught.

Five, seven or more of one kind when planted closely will grow together and appear as one large specimen.

If not massed but spaced so as to eventually grow together the individual plants are evident as individuals, and may not grow together for a long time. This effect, unless adopted for special reasons, is not so good as an unbroken mass, where these succession of groups merge—not abruptly—and are blended.

This harmonious effect of the border as a *whole* is the landscape architect's idea, whereas the layman usually has in mind only the merits of individual plants and exhibits them by contrasts.

In a border plantation, whether it be massed or open, due consideration should be given the sky line. Unless taller growing shrubs or trees are introduced, a flat, squatty, or at least unaccentuated sky line is the result. This is not an infrequent fault, with many otherwise very good plantations. Do not, however, place trees where they will obscure a good view, but rather arrange them to frame a vista.

A massed plantation of shrubbery where annuals and perennials have been introduced for the extreme foreground.

Aside from the economic standpoint the open specimen style is to be recommended where massed planting would have the appearance of forcing too much into a limited space.

Another condition where the open method is advisable is when it will lend distance to the setting of a house. An object seen between two shrubs or trees, as the case may be, has the appearance of being further away. Therefore, if the house is near the sidewalk and the property line along that sidewalk is planted by alternate groups or single specimens and spaces, the glimpse through those spaces from the sidewalk gives the house the appearance of being further away.

If the elevation of the lot is above the sidewalk, and there is, say, a four- or five-foot terrace or slope paralleling same, such a plantation of open specimens along the top of the terrace would be about on a line with the eye of the passerby, or at least not so far under it as not to make shrubs of medium height carry out our idea.

However, if the plantation is on a level with the sidewalk, and, therefore, below one's eyes, taller growing shrubs or small trees must be used. In this case if the size of the property is sufficient the plantation may be of massed shrubbery, and, for a distance scheme, a few small trees like dogwoods, hawthorns, etc., introduced.

If the property be of the average suburban width of 30 to 100 feet, columnar growing specimens, such as birch, Bolleana and Lombardy poplar, ginkgo, etc., are more appropriate by reason

of their limited spreading habit. On the other hand, the creating of this effect by open planting may not be so desirable as massed planting, which would give privacy from the street, and so the property owner is asked to decide which is to be preferred.

The following groupings record a selection of the most popular shrubs. Individual descriptions are well taken care of in the nurseryman's catalogue, and have, therefore, purposely been omitted in this article. The lists are intended to convey the relative positions which the shrubs should occupy in a plantation in regard to height. Some combinations, however, are suggested by the number preceding the plant. Number one, for instance, in the foreground group, will combine with number one in the other groups. Numbers two will go well together, and so on.

The depth of a border plantation will be governed by the amount of space available, and the planter's judgment. It may, therefore, be composed of groups A and B; A, B and C, or A, B, C, D. If very deep, the extreme background may be made up of trees. In the background, by the way, is the best place for the use of purple foliaged trees like River's Purple Beech, Schwedler's Maple (Purple-leaf Norway), Purple Plum and Purple-leaf Barberry.

If something lower growing than Group A is desired for the extreme foreground, annuals or perennials (iris, peonies, phlox, etc.), may be employed.

No formality in this treatment. The irregular arrangement is in keeping with the naturalistic surroundings.

GROUP "A" FOR FOREGROUND.

AVERAGE HEIGHT, 2 TO 4 FEET.

1. Japanese Barberry (*Berberis Thunbergii*).
2. Bush Clover (*Desmodium*).
3. St. John's Wort (*Hypericum*).
4. Verbena Shrub (*Caryopteris*).
5. Dark Pink Spiraea (*Spiraea A. Watterer*).
6. Japanese Rose (*Rosa rugosa alba*).
7. Indian Currant (*Symphoricarpos*).
8. Flowering Almond (*Amygdalus nana*).
9. Dwarf Deutzia (*Deutzia gracilis*).
10. Dwarf Snowball (*Viburnum opulus nana*).
11. Evergreen Azalea (*Azalea amana*).

GROUP B, MEDIUM HEIGHT.

AVERAGE 4 TO 7 FEET.

1. Bridal Wreath (*Spiraea prunifolia*).
2. Van Houtte's Spiraea (*Spiraea Van Houttei*).
3. Sweet Pepper (*Clethra alnifolia*).
4. Hydrangeas (*paniculata* or *grandiflora*).
5. Globe Flower (*Kerria Japonica*).
6. Regel Privet (*Ligustrum Regelianum*).
7. White "Kerria" (*Rhodotypos kerrioides*).
8. Lemoine's Deutzia (*Deutzia Lemoinei*).
9. Common Barberry (*Berberis vulgaris*).
10. Stephanandra.
11. Lemoine's Mock Orange (*Phila. Lemoinei*).

GROUP C, TALL GROWING.

AVERAGE 6 TO 9 FEET.

1. Ibota Pivet (*Ligustrum Ibota*).
2. Weigela Eva Rathke-Crimson.
3. Chaste Shrub (*Vitex incisa*).
4. Tall Deutzia (*Deutzia crenata*).
5. Rose of Sharon (*Hibiscus Syriacus*).
6. Bush Honeysuckle (*Lonicera Morrowi*).
7. Golden Bell (*Forsythia viridissima*).
8. Pearl Bush (*Exochorda grandiflora*).
9. Mock Orange (*Philadelphus coronarius*).
10. Single Jap. Snowball (*Viburnum tomentosum*).
11. French Lilacs (*Syringa*).

GROUP D, VERY TALL.

AVERAGE 8 TO 15 FEET.

1. Pussy Willow (*Salix caprea*).
2. Red Bud (*Cercis Canadensis*).
3. Chinese Lilac (*Syringa Pekinensis*).
4. White Fringe (*Chionanthus Virginica*).
5. Hawthorn (*Crataegus*).
6. Dogwood (*Cornus florida*).
7. Silver Bell (*Halesia tetraptera*).
8. Hercules Club (*Aralia spinosa*).
9. Jap. Storax (*Styrax Japonica*).
10. Cornelian Cherry (*Cornus Mas*).
11. California Privet (*Ligustrum ovalifolium*).

A Plant Worth Growing

Many new plants are introduced each year, but few of them ever become such established garden plants as the Blanket Flower (*Gaillardia*), Phlox, Larkspur, Delphinium, or the Pæony.

Anchusa Italica grandiflora var. *Droptmorei* is a comparatively new plant, which may become a rival of the Larkspur for a place in the flower garden when it is better known.

It is an erect plant, with neat foliage well-proportioned to the height of the plant and the size of the flower.

The flowers are indigo, closely arranged along the stiff and erect stems above the foliage. It blooms during June and July and grows 3 to 4 feet high.

This plant is a marked improvement over *Anchusa Italica*, which has very coarse foliage and flowers far apart on the top-heavy, sprawling stems.

From the complaints I have read in garden magazines some nurserymen are sending out the old *Anchusa Italica* for the new *Droptmorei* variety.

W. LAMB.

Kerosene Emulsion

There are two practical classifications of insect plant pests. One is of those which eat foliage outright; the other suck the juices of stems.

Kerosene Emulsion is generally preferred with which to combat the sucking pests, but it is not always convenient to make, especially in small quantities.

Stock Emulsion can be procured from any firm dealing in horticultural supplies, but it must be diluted with water in proper proportions before using, according to the kind of plants to be sprayed.

Crude Kerosene will destroy foliage, and plants with tender leaves will suffer most. Dilute accordingly. As oil and water do not unite, during the operation of spraying the mixture must be constantly stirred to prevent the Kerosene passing through the spraying apparatus unmixed.

S. M. M.

When planting to produce fall coloring effects do not overlook the common Blackberry, as it seldom misses changing its foliage to a beautiful crimson, with markings different from any other foliage.

H. B.

The Azaleas, particularly the native kinds, enjoy a somewhat shaded position.
The one illustrated is *Azalea mollis*.

Deciduous and Evergreen Shrubs for Shaded Places

EDWIN MATTHEWS.

"What shall I plant that will do well in the shade?" is a pertinent question and one not easily answered. Much depends on what causes the shade, whether it be a building or trees, and, if the latter, what kind?

If it were mere shade to contend with, there would be little trouble, but, unfortunately, shade is more often than not accompanied by an extremely impoverished condition of the soil, but little available plant food, and insufficient moisture.

This condition is usually created by the presence of many hungry roots of adjacent and overhanging trees.

'Neath such trees as Beech, Elm, Maple and other surface-rooting ones it will be readily appreciated how difficult it is to get any form of plant life to grow except moss, unless special steps are taken before planting and special treatment afforded the plants afterward.

The soil in every case should be cultivated and relieved of such surface roots as met with; an added top-dressing of good soil is also necessary. A yearly mulching with manure and frequent supplies of water in dry weather will tend to give the plants a chance to make good.

Under trees whose roots penetrate deeply, like the Oak, the conditions are more favorable, and there is less difficulty in getting plants to thrive.

Another position which is perplexing to the planter is one surrounding the base of a dwelling of the Dutch-Colonial and Old American Farm-house style of architecture on account of the overhanging eaves.

Here insufficient moisture is practically the only drawback, and whether the position be on the shady side of the dwelling or not it is a case of supplying the plants with moisture, and plenty of it, from the garden hose.

The number of shrubs that will do for shaded positions in general are few compared with those that need strong sunlight. Indeed, it must be confessed that one type of evergreen plant is the mainstay.

Let us first speak of the deciduous section of shrubs—*i. e.*, those that lose their leaves in autumn. The usually graceful growth and range of flowering possibilities always render the deciduous plant desirable.

The list herewith appended is a liberal one, and may be subdivided into two groups, namely:

1. Those that do well in shade.
2. Those that thrive indifferently in shade.

The following would come within Group 1:

Azalea calendulacea. Orange-red.
Azalea nudiflora. Pink.
Azalea viscosa. White, tinted pink.
Azalea Vaseyi. Shell-pink.

These are found in Nature gracing our woodlands, invariably in shaded positions. All are spring flowering plants, though *viscosa* is sometimes met with in bloom as late as July.

The Spicewood (*Lindera Benzoin*) and the Witch Hazel (*Hamamelis Virginica*) are also two well-known woodland plants of larger growth. The odorous Spicewood produces quantities of small yellow flowers in April, which are followed by red berries. The *Hamamelis* is unique in choosing late fall and early winter to give us its flowers, yellow and fragrant.

(*Zanthorhiza apiifolia*) Yellow Root is a low-growing plant most valuable for ground cover under trees. Its leaves are very prettily lacinated and in fall assume a golden color. Its flowers are of minor importance.

Hypericum patulum, *Hypericum calycinum* and *Hypericum Moserianum* are excellent low-growing plants for protected shaded and semi-shaded positions. The latter, a hybrid of the former two, has exceptionally attractive flowers of golden-yellow, earning for itself the name of Goldflower. A light covering of leaves or straw-litter in winter is beneficial.

Within Group 2 we would place the following:

White Fringe (*Chionanthus Virginica*).
Flowering Currant (*Ribes aureum* and *floridum*).
Golden Bell (*Forsythia suspensa* and *viridissima*).
Dogwood (*Cornus florida* and *stolonifera*).
Sweet Pepper Bush (*Clethra alnifolia*).
Buttonball Shrub (*Cephalanthus occidentalis*).
Regel's Privet (*Ligustrum Regelianum*).
English Privet (*Ligustrum vulgare*).
Aralia pentaphylla.
Fragrant Honeysuckle (*Lonicera fragrantissima*).
Garland Flower (*Daphne Mezereum*).
Jersey Tea (*Ceanothus Americanus*).

For a position where something moderately high-growing is wanted, use the White Fringe, which will reach 12 feet in height. Were it not to produce its tissue-like flowers in quantity, it would still be an ornamental plant for its leathery dark-green leaves, which apparently are insect-proof.

The Dogwoods as a class do remarkably well in shade, *Cornus florida*, where it has room to grow, assuming tree-like proportions.

The Buttonball Bush is partial to moisture as well as shade. The Pepper Bush is a favorite for its fragrant white flowers in July and August. It does well in light and rather poor soil.

Early and sweet are the blossoms of the "Garland Flower," which appear before it puts forth its leaves; while a pretty mid-summer plant is the "Jersey Tea," the flowers of which completely cover the plant in late June.

The Forsythia, Ribes and the Fragrant Honeysuckle are perhaps more often seen in full sunlight than in shade, yet they would brighten many a dull, shady spot in early spring with their clear-yellow and flesh-tinted fragrant flowers. The Honeysuckle has an additional advantage of retaining its leaves nearly all winter in a semi-shaded but sheltered situation.

The two kinds of Privet mentioned are excellent subjects in affording greenery where it is hard to expect flowers, and are we not glad to get some difficult situation clothed even though it be with leaves only?

A plant with pretty foliage is *Aralia pentaphylla*. One of the best for holding its own in a poor, dry soil. This point alone commends it for a position where its roots will mingle with those of large trees.

A variegated-leaved bush Dogwood. All the Dogwoods are happy in partial shade.

Very few persons know the charming floral display of *Andromeda floribunda*. It is a shade-loving, evergreen shrub.

In closing, it would help matters somewhat if trees that produce dense shade were to receive a judicious thinning of the branches now and again, so that light might be allowed to filter through with its beneficial influence on the plants beneath.

Evergreen Shrubs.

The best evergreens to use in shaded positions are chiefly those of the broad-leaf type, though nearly all evergreens will stand some shade if need be.

The list given below will be sufficient, however, for our purpose.

Rhododendron Native (*R. maximum*).

Rhododendron English Hybrids.

Mountain Laurel (*Kalmia latifolia*).

Andromeda (*A. Japonica* and *floribunda*).

Evergreen Azalea (*Azalea amæna*).

Japanese Holly (*Ilex crenata*).

Osmanthus.

Evergreen Barberries (*Mahonia Japonica* and *Aquifolia*).

The Yews (*Taxus baccata* and varieties).

The Box (*Buxus sempervirens* and varieties).

Evergreen Privet (*Ligustrum Japonicum* and *lucidum*).

Cherry Laurel (*Cerasus Lauro-Cerasus* and var. *Schipkæensis*).

What should we do without Rhododendrons? How often we have recourse to them to mass in some portions of woodland, or to surface some bare position under trees. For this purpose they have proven themselves especially adapted. As is known, they are essentially surface-rooting plants, and for this reason they have a better chance to secure sustenance from the fallen leaves of the trees that may overhang them, and any additional mulching you give them.

Companion to the above is the common Mountain Laurel. Requires the same treatment.

Both the varieties of Andromeda mentioned and the Evergreen Azalea are indispensable where dwarf effects are needed or for an edging to higher growing plants. The cerise-colored flowers of the Azalea form a pleasing contrast to the pure white racemes of the Andromeda.

Ilex crenata and *Osmanthus* are uncommon plants not freely used as yet. The latter, though not a Holly, resembles it more than does *I. crenata*, which is a true Holly. Its flowers, which appear in the autumn, are very fragrant. It is a near relative to the Olive tree, which accounts for its fragrance. Both plants maintain a fine green appearance throughout the year.

To have the Mahonias retain their leaves in good condition through the winter it is essential to have them in a position shaded from the winter sun, which burns them when in a frozen state. The leaves of *M. aquifolia* assume a bronze appearance during the winter, and are very pleasing. The yellow flowers of both are conspicuous in early spring.

For that position on the shaded side of the dwelling where formal plants are in keeping, use the Box-bush and the Yews in variety. There is nothing so fitting as these.

Plants that are sure to become popular when they are more known are the "Evergreen Privets." Hardy as far north as Philadelphia and possibly in New York State if given a sheltered position. The leaves are larger and more leathery than the California Privet, also a darker green.

The "Cherry Laurel" is a plant but rarely seen as far north as Philadelphia. A few good plants seen in private collections prove them hardy, however. The variety "*Schipkæensis*" seems hardier than the type. The bold green foliage makes a splendid showing, but it is best when planted in a well-protected and somewhat shaded place.

The American White Thorn, *Crataegus coccinea*. You should see this plant with its crop of berries in autumn. They are just as showy as the blossoms.

Tree-Shrubs

HARRY BROWN.

This class of plants consists of those which in their younger days are usually associated with shrubs and keep in harmony with them, but gradually outgrow a true shrub in height or spread, and so crowd the plants about them.

Where they are used in borders they should be given ample room. Otherwise plant them out as lone specimens, or in large groups for windbreaks, screens, etc.

DWARF MAPLES (*Acer*).

Acer rufinerve. Of Japanese origin. A medium tall, bushy tree, with white striped bark and large leaves, which color beautifully in the autumn. An unusual and attractive plant.

A. striatum (*Pennsylvanicum*). Like *rufinerve*, but makes a taller and more open tree. Thrives in very light soil.

A. Tataricum. A shrubby tree of rounded outlines. Very hardy. Leaves are quite small and numerous.

A. Tataricum Ginnale. Same as the preceding, but the leaves turn to brilliant tints in the autumn. Does well in a moist situation.

JAPANESE MAPLES (*Acer*).

Acer polymorphum and its varieties are attractive in spring, summer and autumn.

A. ampelopsilobum has leaves corresponding to the Japanese Ivy, which change to a crimson in the fall.

A. polymorphum atropurpureum is the favorite blood-leaved variety. Marvelous in the spring when the young leaves are blood-red. As the heat of summer approaches they change to a darker red.

A. cristatum. Singular foliage, long and with cut and curled edges. An odd variety.

One would not recognize this as a specimen Japanese Maple. Usually they are found from 6 to 10 ft. in height.

A. reticulatum. This is at its best in spring when the thin leaves are veined with yellow and green. The veining fades as the heat of summer approaches.

A. pinnatifolium atropurpureum. A beautiful and little known variety. The leaf is divided into five narrow strips, which taper to a sharp point. Its blood-red color in spring makes it very pretty. The same is had in green leaves.

A. dissectum atropurpureum. This is the Fern-leaved Japanese Maple. One of the best, with its very finely cut leaves of a reddish-purple. The pendulous branches and low-spreading habit make a fine specimen. This is also had in green leaves.

A. Japonicum aureum. At its best in early spring when the rounded leaves are of a bright golden color. The slowest-growing variety. The green *Japonicum* grows more rapidly and is a very pretty plant.

A. palmatum. Has very large, rounded leaves.

A. Aconitifolium is similar in size, but with the finely divided leaves, resembling those of the Aconite. A very singular form.

MISCELLANEOUS.

Amelanchier Botryapium (June Berry). Toward the end of April the June Berry opens its white flowers, which are followed by edible berries. *Nana* is a dwarf variety, which fruits when

only several feet high. Both are fond of partial shade.

Carpinus Americana (Hornbeam). This is a close-growing small tree, good for screening or hedge purposes. The European species has about the same habits, but the dry leaves will hold on nearly the entire winter.

Castanea pumila (Chinquapin Chestnut). The small, rounded seeds are much sweeter than the American Chestnut. The tree is very bushy and low; small plants producing nuts.

Cercidiphyllum Japonicum (Katsura Tree). This Japanese plant is one of the best for ornamental plantings. It makes light twiggy wood, on which are very pretty heart-shaped leaves. Will grow tall if so allowed.

Cercis Canadensis (American Judas) and *Cercis Japonica*. The small, pink, pea-shaped flowers, coming in early spring before the leaves, are attractive. There is also a new white-flowered variety. The Japanese differs from the American in having flowers of a rose color and in growing more dense and shrub-like.

Chionanthus Virginica (White Fringe). The beautiful, white, fringe-like flowers are in their prime at a time when the first leaves have fully developed. The latter are of a light-green color, from which they turn much darker later on. The blue-black berries following are also attractive.

A small illustration of the foliage of Ginnale Maple. In autumn it is a rich crimson

Citrus trifoliata. A real Hardy Orange. The white flowers are very attractive and are followed by small oranges (not edible), which are very ornamental, hanging on until winter. It is also useful as a defensive hedge plant. Perfectly hardy as far north as Philadelphia.

Clerodendron trichotomum. In August this
(CONTINUED ON PAGE 36)

Herbaceous Perennials for Dry Places

WILLIAM LAMB.

One is commonly confronted with planting situations that are very dry, especially in summer, when long seasons of drought are likely to occur and where vegetation is not easily established. Many such places are left unplanted for the reason that owners are at a loss to know just what plants will grow successfully. The expense of watering plants artificially is often prohibitive.

Nature provides suitable plants for just such places, and a barren looking bank, wall or other dry location can be made attractive by the proper selection.

Many of the plants will cover unsightly, dry places with a beautiful green verdure and at the proper season produce a gorgeous mass of blossoms.

The many varieties of *Sedum* are probably the most persistent perennials for growing in dry places; owing to their peculiar construction they are able to withstand long periods of drought and are particularly adapted for planting between the stones in dry walls or other places where it would seem barely enough soil and nourishment are present for them to exist. The tall-growing *Sedums* are especially suitable for dry borders; they will thrive and make a grand display where most other plants would perish from lack of moisture.

The low-growing *Sedums* are used extensively to cover the ground with a dense mat of green, which they do in a short time.

Periods of drought or of cold have no effect on them and they are valuable plants for rockwork and other dry positions exposed directly to the sun.

Sedum sexangulare, well known as Love-entangle, has been used many years for planting on dry banks, graves and rockwork; it is a conspicuous plant in old gardens, being used in various ways—for the retention of earth in hanging baskets, as a ground cover for porch boxes, urns and other receptacles surmounting gateposts, tree stumps, etc. Several low-growing species of *Sedum* are equally as useful and effective as *sexangulare*, but not so well known.

The tall-growing *Sedums* attain 1 foot in height and are very showy when in bloom, which makes them especially valuable for dry borders and similar places where but poor results could be expected from the usual garden plants.

Solid masses of color in various shades of pink, yellow and white can be obtained in either the creeping or tall-growing *Sedums*.

Sedum album has white flowers, *S. Hispanicum* blush pink, *S. hybridum luteum* yellow, *S. hybridum rubrum* red, and *S. sexangulare* yellow. All are low-growing, creeping sorts.

Among the best taller growing kinds are *S. Rhodiola*, with deep, rosy pink flowers. *S. spectabilis* (Showy *Sedum*) has pink flowers and is one of the most popular and satisfactory garden flowers. *S. Kamptschaticum* and *S. Lageri* have yellow flowers, *S. marginatum variegatum* has blush pink flowers and beautiful variegated foliage. *Sedums* begin to bloom in July and continue on through September.

After the plants just described the following will be found the toughest and most persistent plants for hot and dry places:

Alyssum argenteum grows 1 foot high, has silvery foliage and is covered with myriads of flowers, old gold in color, during June. A mass of these plants is very conspicuous through the flowering period.

Asclepias tuberosa in its native haunts is found growing in locations that are high, dry and very stony or sandy. The flowers are orange red, very showy and lasting. Grows 1 to 1½ feet high. Blooms in July.

Stachys lanata, Bunny's Ears, a spreading plant, with white, woolly leaves and spikes of pink flowers. Blooms continually through July and August. Excellent in very dry situations, as are most plants with this type of foliage.

Hieracium aurantiacum is soon firmly established after planting. It is very low-growing, the foliage lying flat against the soil. Orange-red flowers, on stems 6 to 8 inches high, appear profusely in June. Its seeds, scattered by winds, in some places may become an undesirable weed. A good plant in dry situations.

Lotus corniculatus, Trefoil, with small pea-shaped flowers in globular heads, blooms all summer and fall. Six inches high. Excellent for well-drained places.

Oenothera Missouriensis, one of the Evening Primrose family, with its thick, fleshy roots, is a particularly good plant for dry places. It is somewhat trailing in habit. Grows 6 inches high. Has large, lemon-yellow flowers, 4 inches in diameter and curiously winged fruit.

Coreopsis rosea is excellent for planting on dry banks. It spreads rapidly in a dense carpet of dark green, from 3 to 6 inches high. Has abundant rose-colored flowers in July and August.

Hardy *Ageratum*, *Eupatorium ageratoides*, grows 3 feet high. It is covered with great masses of feathery, white flowers through August and September. This plant seems to have the tenacious qualities required for thriving on the least amount of nourishment.

The *Solidago*, or Golden Rod, is very similar in this respect. Among the many kinds growing along the roadsides in uncultivated fields and meadows can be found those suited to various situations, either dry or moist. The true value of these beautiful plants, growing in abundance uncultivated, is seldom appreciated. What an agreeable change could be made in the appearance of dry banks and other waste places by clearing out the weeds and planting Golden Rod, suitable to the requirements of the location.

The Hardy Asters, *Boltonia* and *Erigeron*, produce a wealth of bloom. What is lacking in the size of the single flower is fully made up in the quantity of the blooms on the whole plant. That they will thrive in dry places, with no harmful effects to their general appearance, can be readily seen by a little observation in their natural haunts.

Many of the cultivated kinds are vast improvements over the wild Asters. *A. alpina* is a low-growing species, with large, blue flowers. Valuable as a rock plant. *A. Novæ-Angliæ* has blue-purple flowers and *A. var. rosea* is a pretty shade of pink. They grow 3 to 5 feet high. *A. Novi Belgii* var. *Robert Parker* has pale heliotrope flowers, grows 3½ to 4 feet high, as do varieties *St. Brigid*, white tinted lilac; *Top Sawyer*, lavender; *White Queen*, white, and *Edna Mercia*, deep rose. The latter grows only 1½ to 2 feet high.

The tall-growing Asters usually have small individual flowers, except *A. Tataricus*, an unusual kind, which grows 6 to 7 feet high. The low-growing kinds produce much larger flowers. *Aster amellus elegans*, light blue; *A. var. Mackii*, violet; *A. cassiarabicus grandiflorus*, light blue, are among the best kinds, with large flowers, growing from 1 to 2 feet high. A pretty novelty. *A. hybrida* has yellow flowers, grows 1½ to 2 feet and is new and distinct.

Other tall-growing Asters of merit are *A. amethystinus*, blue; *A. formosissimus*, bright violet; *A. laevis*, very light blue; *A. ptarmicoides*,

white, and *A. pyrenaicus*, mauve. All grow from 2½ to 4 feet high.

A proper selection of these plants will help considerably to brighten the garden from July to November, as well as to cover unsightly dry places where plants are hard to grow.

Saponaria officinalis fl. pl., like the common *S. officinalis*, or Bouncing Bet, will do well in exceptionally dry locations. It has pretty pink, double flowers from July to September.

No better plants can be chosen for dry places, where tall-growing kinds will be suitable, than *Helianthus*. Once established very little trouble will be experienced to keep out weeds.

The *Helianthus* grows rapidly. Some species reach 8 to 9 feet high. They absorb all moisture within reach and grow close enough together to effectually discourage weeds or other plants from growing among them.

Helianthus decapetalus multiflorus plenus and *H. var. Soliel d'Or*, 3 feet tall, both double flowers, the latter very similar to a well-formed yellow Dahlia, require better treatment than any of the following kinds. They bloom in July and August. *H. doronocoides*, a single flowered species, 4 to 5 feet high, is in bloom at the same time. *H. giganteus*, 7 to 9 feet, and *H. laetiflorus* bloom in August.

During August and September three excellent kinds are in flower: *H. multiflorus maximus* has large, single flowers and broad, dark green foliage, grows 5 to 6 feet. *H. mollis* is very distinct with glaucous foliage, which appears to be coated with dew, 3 to 4 feet. *H. rigidus* var. *Miss Mellish* is very showy. The flowers are borne on long, stiff, slender stems and have large petals. Fine for cutting.

H. Maximilliana is an abundant bloomer. The flowers are distributed evenly along the stem (which is 6 to 7 feet) from near the ground to the top. It is one of the last plants to stay in bloom, out of doors, at its best during September and October. *H. orgyalis* is in bloom at the same time, but does not last so long. The flowers of this kind are mostly at the top of the stems, which attain 6 to 8 feet, the foliage is long, narrow and are very gracefully arranged on the stems.

The *Helianthus* mentioned above are all perennials, the flowers are various shades of yellow, and all are on stems suitable for cutting.

Geranium, or Stork's Bill, is an excellent plant for dry places. It is perfectly hardy and produces a heavy growth of luxuriant foliage. The

flowers are quite showy. *Geranium Ibericum album*, white; *G. maculatum*, pink; *G. pratense*, purple, and *G. Richardsoni*, white, bloom during May and June, growing about 2 feet high. *G. sanguineum* grows 1 to 1½ feet, has red flowers, is in bloom from June to September. This plant is somewhat trailing in habit and neat and pretty in appearance. The foliage is not so large as of the other kinds.

The *Echinops*, or Globe Thistle, is a strong growing, bold plant, clear cut in appearance; *E. bannaticus*, metallic blue, 5 to 6 feet; *E. stricta*, white, 5 to 6 feet; *E. ritro*, deep metallic blue, 3 to 4 feet. The flowers are clustered in a ball on the tip of stiff, straight stems from July to September. The foliage is large, bending in graceful curves.

Eryngium, or Sea Holly, grows 2 to 3 feet and blooms through July to September. *E. amethystina* is very similar to *Echinops* in general appearance, except that it does not grow tall. *E. planum* has smooth, shining green foliage and blue flowers. *E. maritimum* has steel blue flowers and foliage much like Holly.

Bocconia cordata, or Plume Poppy, is an excellent, tall-growing plant, 6 to 8 feet high, with large leaves. The flowers are in plume-like clusters on the stem above the foliage, and are white and feathery. Blooms throughout July. After that time the seed pods stay on for several weeks, giving the plant much the same appearance as when in bloom. Once established in a position the Plume Poppy is hard to remove or eradicate and should be planted at once in a location where it is to remain permanently.

Opuntia Rafinesquii, the Hardy Cactus, is a very persistent perennial for dry places. It has very large, showy yellow flowers in June, with dull red, pear-shaped fruit later, from which the common name "Prickly Pear" is derived. The *Sempervivums*, or House Leeks, appear like small rosettes of pointed, thick, green leaves, the flowers, usually pink, are borne in rosettes, on thick stems 6 to 8 inches long.

There are many other plants suitable for dry borders, rock gardens and places where some attention can be given them, but those described are peculiarly adapted for growing in very dry places, where they will thrive with practically no other attention or care than that which comes to them naturally. Cutting down the dead tops late in Autumn, and at times clearing out the weeds, is all that is necessary.

A mulching with stable manure after cutting off the dead tops in the fall will be beneficial

and improve the growth of the plants and quality of the flowers for the next season.

Evergreen Garden Perennials

In the midst of winter, when the ground generally is muddy and unattractive in sub-temperate climates, with scarcely even a pretty snow blanket to fully change the scene, it is refreshing to see green foliage covering the ground.

Perhaps no plant is more unexpectedly satisfactory to this end than the hardy Perennial Pea (*Lathyrus grandiflorus*). At this writing, January 4th, under a scattering snow, the mass of green growth is delightful. This might well have been added to the list of indispensable plants for the rock garden which appeared in the January BULLETIN. Few plants will better offer the combination of beautiful flowers and winter effect in foliage.

S. M. M.

The Columbines

A very beautiful and graceful genus of plant is the *Aquilegia*, known and loved by all, and, therefore, found in every hardy garden, large or small.

Did it not bear flowers we would give it room for its foliage alone, which in the spring is as

graceful as any treasured fern of the greenhouse.

In this genus we have both English and American wildflowers, *A. vulgaris* being a field flower of England, while *A. Canadensis* the species native to our New England and Middle States. How the bees delight to delve deep into the nectaries of the flowers to obtain the enticing sweetness found there! It is on account of the bees' activity and the freeness of this group of plants to hybridize one with another that it is extremely difficult for the nurseryman to insure the customer a certain color, for while seed may be saved from a beautiful blue or white, the plants resultant may bear flowers of shades intermediate of both these colors. Among the kinds of Columbines that appear to be fairly constant in color we would especially name the following:

Aquilegia cærulea (the state flower of Colorado), which bears graceful blue and white flowers.

A. chrysantha gives us a beautiful yellow flower.

A. Skinneri has bright scarlet flowers, while *A. flabellata nana alba* is a pretty dwarf sort, bearing a plenteous supply of white flowers.

In the European species, *vulgaris*, we have pure whites, deep blues and pale pinks, with all intermediate shades.

Mass them in the hardy garden, group them in the Rock Garden, scatter them freely in the wild garden—all three positions this plant will fill with a superlative grace. EDWIN MATTHEWS.

Trees for the Squirrels

A question that is closely related to conservation of our natural forests (though not so important perhaps) is that of the preservation of our feathered and other friends of the woodland.

What would our parks and gardens be without the animated presence of our feathered songsters or the quick agility and clever antics of the squirrel.

The latter, next to the birds, are the most graceful of our woodland pets.

To preserve them from extermination then is the duty of every one.

Thanks to the vigilant care of those in authority in our city parks there are still to be seen a goodly number of them playing hide-and-seek in their own inimitable way among the branches of the trees.

The grounds of Girard College, Philadelphia,

though situated in the heart of a great city, have the touch of the rural about them when, on entering, you are greeted with a sight of the gray and the foxtail squirrels.

There they are so accustomed to being fed by visitors (children and adults alike) that they approach you with an air of inquiry, which, if rightly interpreted in words, would be "All contributions in the form of peanuts, hazelnuts, almonds, chestnuts and the like will be thankfully received."

To preserve unto the squirrel, however, its natural and inbred desire to store for itself food to last through the winter months we should not forget, when planting our grounds, to have a good sprinkling of nut-producing trees, which will supply them the material to store.

The following is a list covering those suited to the climate of the North:

The Hickory Nuts.	The Acorns (Oaks).
<i>Carya alba</i> ,	<i>Quercus alba</i> ,
<i>Carya sulcata</i> ,	<i>Quercus Cerris</i> ,
<i>Carya tomentosa</i> ,	<i>Quercus coccinea</i> ,
<i>Carya olivæformis</i>	<i>Quercus macrocarpa</i> ,
or Pecan Nut.	<i>Quercus obtusiloba</i> ,
The Chestnuts.	<i>Quercus nigra</i> ,
<i>Castanea Americana</i> ,	<i>Quercus Prinos</i> ,
<i>Castanea vesca</i> ,	<i>Quercus palustris</i> ,
<i>Castanea Japonica</i> ,	<i>Quercus rubra</i> ,
The Beech Nuts.	<i>Quercus tinctoria</i> ,
<i>Fagus sylvatica</i> ,	
<i>Fagus Americana</i> ,	The Hazelnuts.
The Walnuts and	<i>Corylus Americana</i> ,
Butternuts.	<i>Corylus avellana</i> ,
<i>Juglans cinerea</i> ,	
<i>Juglans nigra</i> ,	
<i>Juglans regia</i> ,	
<i>Liriodendron tulipifera</i> ,	The Tulip Tree.

In addition to the above, all of which the squirrels are very fond of, there are several of the pine and spruces of which cones they are partial to, especially those kinds of which seeds are oily and full of meat, like the Douglas Spruce and *Pinus edulis*. The latter, a Western species, is known as the "Nut Pine" or "Pinyon."

Its seeds are most nutritious, serving as an article of food for the Indians.

The squirrel, too, with its keen sense of appreciation for that which is good, stores it in great quantity.

Indeed, collectors of seeds tell us they have come to rely somewhat on the efforts of the squirrel for their source of supply.

This we must confess is rather hard on the squirrel, to be thus taken advantage of, but we must excuse the meanness in this or any instance where seeds of trees valuable to forestry are being collected. EDWIN MATTHEWS.

The famous avenue of *Salisburia*, *Ginkgo* or Maidenhair Trees at the National Capitol.

Trees for Avenue Purposes

S. NEWMAN BAXTER.

Two of the most popular demands of the planter these days are for quick-growing trees and low prices. Saner qualifications are given less thought. If the planter's object is to screen an unsightly view, then a craving for quick growth is pardonable; but even under such conditions beware lest the Carolina Poplar (*Populus monilifera*) creeps in. It is about the quickest growing tree, but harbors insect pests, and the leaves invariably begin to fall in mid-summer, making it altogether an undesirable tree. Better quick-growing trees are the Silver Maple (*Acer dasycarpum*), Oriental Plane (*Platanus orientalis*) and Western Catalpa (*Catalpa speciosa*), but even the first of these is to be used with caution.

Where quick growth is imperative, alternate these trees with hard-woods of slower growth. Set them closer together and cut out the poorer kind when the others have grown large enough to warrant it.

As to cost, don't invest in trees for the sake of getting a bargain. Be sure that they are the sort you want to accomplish your particular

purpose, and then see that they are the very best specimens procurable, regardless of price. If you begrudge or cannot afford trees to which the nurseryman has given especial care and attention that they may be better than the ordinary grown, and for which, naturally, he must charge a little more, reduce the number of your purchase, or buy a smaller size, but *get first-class specimens*. A fine old tree speaks volumes to the memory of its planter. Would you select an inferior—aye, even mediocre—monument?

The best tree to plant could not be named to the satisfaction of every one, and would evoke endless discussion and differences of opinion. Let us therefore merely enumerate a few of the most worthy and popular and their respective merits.

OAKS.

Oaks are undoubtedly becoming more popular from year to year, and deservedly so, for they represent a robust, long-lived race and are comparatively free of insect attacks.

The rapidity of growth of the Pin Oak (*Quer-*

cus palustris), if planted in good soil, will dispel the common impression that all oaks are slow growers. The Pin Oak, though, is perhaps a faster growing tree than its brethren. The drooping tendency of the lower branches is a graceful characteristic. Its adaptability for avenue planting is well illustrated in Fairmount Park, Philadelphia.

Closely resembling the Pin Oak in leaf is the Scarlet Oak (*Quercus coccinea*), a desirable feature of which is its brilliant autumnal coloring.

The same trait applies to the Red Oak (*Quercus rubra*). The leaves, however, being less divided than those of the Scarlet Oak, possess more character, and the red autumn color is beautifully blended with green. The Red Oak, too, is usually a better formed tree, having a more open and bolder growth.

There are many other oaks, of course, such as Chestnut, Swamp White and Bur, but the three described will give satisfaction. Plant oaks and you cannot go astray.

Where there is a choice, give the Pin a moist location and the Scarlet and Red the drier soil.

In street planting, for which they are splendidly adapted, space them 30 to 50 feet apart.

The Elm, though troubled with enemies, in the form of insects, is and will always remain very popular.

ENGLISH-GROWN RHODODENDRONS

You cannot buy better Rhododendrons than those from England. They are recognized as being superior to the soft Holland-grown kinds.

Our stock is exclusively English-grown, and as there is a shortage in stock in England, our importation is very much reduced. We cannot get what we want.

This announcement is printed as a reminder to our customers and friends.

Send *quickly* your list of needs. Last year we had to turn down orders, and this season the supply is even more limited.

Write today—Orders will be booked as received.

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MAPLES.

No one will gainsay the maples' popularity. The Norway (*Acer plantanoides*), Sugar or Hard (*Acer saccharinum*, or *sacharum*, as later authorities term it), and Silver, or Soft (*Acer dasycarpum*, also termed *Acer saccharinum*), lead the list.

The Norway, on account of its globular outline of growth, is well-suited for formal effects and, for this very same reason, is avoided by the landscape gardener in naturalistic plantings. It possesses the best dark-green foliage and is the last to shed its leaves. It is less susceptible to infestation by scale insects than the Sugar or Silver. In addition, its lovely yellow flowers in spring class it among the prettiest flowering trees.

The Sugar, however, is a splendid tree, and its autumnal coloring of burnt-orange and yellow is too well known to need description. It grows taller than the Norway and usually possesses a straighter trunk. Both are good where a medium-sized tree is desired, and if undecided in a choice, select the one which you notice to flourish the better in your locality. As a general guide it will be found that the Norway will do better than the other in a stiff soil; the Sugar is a hill-side tree, where soil is usually light or well-drained. Plant them 25 to 35 feet apart.

Those who like color will be pleased with Schwedler's Norway Maple, the leaves of which are at first appearing blood-red, changing to a darker shade, and ultimately green as the season wanes.

The Silver Maple is not to be recommended as a street tree, particularly when the space is limited. It forms a large and mighty graceful tree, but is condemned for the brittleness of its branches and for surface-rooting, which is likely to throw the path out of alignment. Wind and ice storms play havoc with it. It is too graceful, however, to be ignored, and will repay one for overlooking its faults. Especially effective is it when planted along either side of a driveway, where its interlacing branches form a shady canopy. Plant 30 to 40 feet apart.

In these days of tree surgery the Silver Maple may be headed back when it becomes too open and spray-like and, if scientifically done, will be rendered better able to withstand the storms.

Wier's Cut-leaf (*Acer dasycarpum Wieri*) is a form of the Silver Maple, and is regarded as an improvement on the parent. Its leaves are more divided, branches more pendulous. It seldom attains the height of the Silver Maple, and is especially desirable as a single lawn specimen.

SWEET GUM.

In moist places the Sweet Gum will prove a delight. There is no handsomer tree in its rugged character, corky bark, and leaves, beautiful in summer green and autumn coloring. Must be pruned severely to move safely.

CEDRELA.

A Chinese tree of great value, rapid-growing and easy to establish, is *Cedrela Sinensis*. It is inclined to grow crooked in youth, but attains beautiful proportions in the end.

ELMS.

Elms are much in use for avenue trees and are indeed worthy, though unfortunately their susceptibility to insect pests renders their adoption inadvisable unless means of combating the pests are available.

Though not generally of pleasing proportions when in the nursery stage, they outgrow this lack of form, and one need only see the handsome avenues in New England to want the American Elm (*Ulmus Americana*), pests or no pests. There are several kinds in use—Slippery Elm, Scotch Elm, English Elm, etc., but the American, with large leaf and open, graceful growth, is most commonly planted. Plant 40 to 50 feet apart.

PLANE OR SYCAMORE.

The Plane forms a good specimen for avenue planting. Its quick and durable growth is a much-desired characteristic.

The European or Oriental Plane (*Platanus orientalis*) is very symmetrical. It is supplanting the American Plane (*Platanus occidentalis*) in favor, due probably to its more compact habit and possibly, too, to the fact that it is less affected by blight in most sections. Late spring frosts and blight go hand in hand to destroy the new growth of the American Plane, and as a result that tree shows a series of "kinky," immature growths. This is not so evident in the South, where it makes a handsome specimen, and the whiteness of the bark is an attraction of the winter landscape. There is perhaps no street tree that more readily accommodates itself to adverse conditions than the Oriental Plane. Plant the Oriental 30 to 40 feet apart, and the American 30 to 50 feet.

LINDENS.

The Lindens are worth considering. They form shapely trees, the European Small-leaf (*Tilia Europæa*) developing a head not unlike the Nor-

THREE UNUSUAL Flowering Trees

Make YOUR lawn distinctive
from that of your neighbor's

You know the Magnolias, the Horse Chestnut, and other flowering trees quite commonly planted, but here are three trees which we doubt if you ever saw in flower.

The *Styrax Japonica* has pure white flowers like a *Fuchsia* in great profusion all over the tree.

The Varnish tree, *Kœlreuteria*, has immense panicles of orange-yellow flowers in July. It is a treasure.

In August the yellowish-white clusters of flowers on the Chinese Pagoda tree (*Sophora Japonica*) are showy and very ornamental. It has also beautiful, dark green foliage.

Why not individualize your lawn by setting out on it these three particularly choice and uncommon trees? You could not find a better time than the present.

- 1 *Styrax Japonica* 3 to 4 ft.
- 1 *Kœlreuteria* (Varnish Tree) . . 4 to 6 ft.
- 1 *Sophora Japonica* (Pagoda Tree) 3 to 4 ft.

Collection of three
(one of each) **\$3.50**

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Variegated Evergreen Euonymus

Vine, Bush and Edging Plant

There is so much good in this charming shrub-vine it is difficult to sum up all in such a short space.

We call it a shrub-vine, as it will serve as one or the other as may please the owner.

It is evergreen and considerably harder than the English Ivy.

Of rather slow growth it is highly suitable for low walls, though eventually it will climb to 25 or 30 feet high.

It is a self-clinging vine, hugging stone, brick or cement surfaces very closely.

As a running vine for banks and rocky slopes, it is useful.

The bright variegation of white over the rich green is quite striking and pretty.

When desired as a bush clip yearly or oftener, and low, compact bushes may be had. These are well-suited for edging evergreen beds, the variegation giving a pleasing contrast to the green of evergreens.

It may also be used as dwarf edging, and is harder than the box.

We have a fine lot of strong, five-year-old clumps at 50 cts. each; 5 for \$2.00; 50 for \$15.00.

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EXTRA STRONG BONE MEAL

Though not the pleasantest article to handle, bone meal certainly contains the real plant food. It gets to work quickly if spread early and you can see results. You may pay more but you can't get better than the high grade we offer.

MEEHANS' PURE BONE MEAL

25 lbs.	\$.75	100 lbs.	\$ 2.00
50 lbs.	1.25	1 ton (2000 lbs.)	30.00
1 ton, delivered locally			32.00

Quantity Required.—One pound for each 10 square feet; 1½ to 2 tons to the acre.

THOMAS MEEHAN & SONS
Germantown, Philadelphia, Pa.

way Maple, though slightly more elliptical. Bees are fond of the blossoms. The American (*Tilia Americana*), with its very large leaf, grows larger and should be given 30 to 50 feet. One of its failings is to shed its leaves early, but this is not objectionable for summer residences. Thirty to 40 feet will suffice for the other.

ASHES.

Among the Ashes, of course, the American White (*Fraxinus Americana*) will be our first selection. The Green (*Fraxinus viridis*) bears such a close resemblance the novice cannot tell them apart, though the White is really superior. Both adapt themselves well to their surroundings. If given room to spread, they will do so; or if adjacent objects prevent same, will gracefully abandon the spreading tendency for an upward course. This is considered one of the most desirable trees in the Middle and Northern States.

GINKGO.

The great favorite street tree of Washington is the Japanese Ginkgo (*Salisburia adiantifolia*). A very peculiar tree, with few side branches in youth, it develops into a fine spreading tree, especially if judiciously pruned at the start. It has a leaf unlike every other tree, resembling the fan-shaped leaflets of the Maiden-hair Fern (after which it is named). These leaves are apparently immune from insect ravages and remain green to the last, and do not fall till long after maples have lost their leaves. It thrives everywhere. Plant 25 to 30 feet apart.

Much could be written on the possibilities for avenue purposes of trees not already mentioned, but the foregoing comprise a list, a selection from which will keep the planter within the bounds of old standbys.

Use one kind of tree throughout an avenue, except where a quick-growing temporary tree be alternated, planting them opposite one another. If the line be a sharp curve, opposite planting should be abandoned to the regular interval style, resuming the opposite system where the curve straightens. The opposite method does not work out so well where the street is so narrow as to make the trees overlap. In this case it is better to plant at regular intervals, having the trees on one side opposite the space on the other, in zigzag fashion.

What size tree should one plant? Well, for an ornamental shade tree, let it be about 12 feet high and 2 inches caliper at the ground. This is simply a good, average size. Some planters advocate smaller trees, claiming that they take hold quicker after transplanting. The latter depends, however, on the quality of the nursery stock.

Granting such may be the case, smaller trees may be used for lawn purposes, but it is always better to procure a tree not less than 12 feet for sidewalk planting; particularly if planted along the curb or in a position it is likely to receive hard usage. A large tree will stand knocks better than a small one. In fact, even larger trees may be employed—say, 5 inches caliper and 18 to 20 feet high—and if they have received frequent transplanting or roots pruned in the nursery, as they should, little danger need be entertained for their successful transplanting. For sidewalk purposes it is better to call for a high-branched tree. Remember, too, that tree-guards are well worth their cost, and that they should be placed when the tree is planted. Have you ever noticed how sidewalk trees fall the victims to the baker's or butcher's horse and, if not totally destroyed, scarred and rendered unsound? All on account of the absence of tree-guards!

Trees especially desirable in the South and far West, and in special localities such as wind-swept seacoasts, are better separately considered in connection with other plants for general planting, and this will be covered in another article.

Plan before you plant! Foresight should prevail. Seek expert advice and opinions before making your tree purchase.

You may be familiar with trees, you may have your favorites, you may have some pet scheme, but even so there are men in the profession who can enlighten you to an extent that perhaps you never gave thought; men who devote their whole time to a consideration of the best uses to which individual trees may be put and their adaptability to your conditions.

The ideas and advice of such men are mighty valuable, so if you purpose planting on an extensive scale, call in the landscape gardener. If your planting is to be small, these few notes may serve as a guide in formulating your plans.

The Larkspurs

How pleasing to the eye is the blue of the Larkspur! No other hardy perennial we think gives such rich tones of blue; and no hardy garden seems complete without it. The tall spikes of the species *elatum*, rising well above its ornamental foliage, relieves that flatness found sometimes in the massing of plants, and gives it that irregularity which is the making of the old-fashioned English garden.

Delphinium formosum is not so tall as the former, and should be brought more to the foreground, in borders or beds, while *D. Sinensis*, the little Chinese kind, can be used as an edging plant. Its long season of flowering makes it an invaluable plant for this purpose, and the rich blues it affords are equal to those found in the taller kinds, even if it is modest in stature.

The Larkspurs have come in for a considerable amount of attention from the hybridist, both in Europe and this country, till to-day we have for our garden the blues to match the summer sky, the indigo that always attracts the attention, and a wonderful number of intermediate shades and combination of shades, together with a marked improvement in form and size of flower. All of this has crowned the efforts of the hybridist and are ours to reap a pleasure from.

E. M.

The Shaggy Bark RED BIRCH

Look at this bark, and you cannot help admire its shaggy, disheveled appearance. In color it is reddish-brown and very attractive.

You can appreciate, too, the many possibilities that such a tree has in producing distinctive lawn effects.

If you have a stream on your grounds or some rich bottom land, here is where the Red Birch will be happy, though much moisture is not essential.

It takes well-grown nursery trees to move satisfactorily, and those we have are of this kind—ready for immediate transplanting.

Only in spring are the best results possible. Order early and let us reserve some for you.

6 to 8 ft.	\$1.25 each	5 for \$ 5.00
8 to 10 ft.	1.75 "	5 for 7.00
10 to 12 ft.	2.50 "	5 for 10.00

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OUR revised, spring plant book is purely a price list. There is not space within the 100 pages for detail descriptions of plants.

If you need a full, descriptive catalog we will gladly send you, while they last, a copy of our manual of 1909. Send 4c to cover postage.

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Are you seeking some decidedly fine Dahlias, some a little better than the common run?

If you are, you'll find them in this superb collection of varieties comprising the cream.

You run absolutely no risk. The group is A-1 in quality and size of roots.

Here is the collection:

5 Cactus Dahlias	5 Decorative Dahlias
3 Giant	5 Show
5 New Dahlias	

(Worth at least \$4.50) for **\$3.50**

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PURE CANADIAN Hard Wood Ashes

To sweeten up a sour lawn or improve a heavy soil get Wood Ashes. When you do, see that it is good all the way through. By experience we have learned that there are a **great many** grades. Here is as good as money will buy. Ashes from the hard wood sections of Canada and all unleached and of the highest fertilizing value.

These may be applied on the same ground on which bone meal has been used, but let it follow three or four weeks later.

MEEHANS' UNLEACHED WOOD ASHES

50 lbs.	\$ 1.00	1 bbl. (200 lbs.) . . .	\$ 2.75
100 lbs.	1.50	1000 lbs.	11.00
1 ton (2000 lbs.) . . .	22.00;	delivered locally . . .	24.00

We can quote very low rates on carload lots.

Quantity Required.—One pound for each 10 square feet; 1½ to 2 tons to the acre.

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GERMAN GARDENER seeks a situation on a private estate as Manager or Superintendent, preferably in New York or New England. Extensive experience in general gardening and greenhouse work on several large estates. Holds excellent letters of recommendation. Single and 36 years of age. For further particulars, address M. S., care of Thomas Meehan & Sons, Inc., Philadelphia, Pa.

Special Information Department

A. TREE FOR THE CITY STREETS.

"I want a nice-appearing tree without attractions to boys, such as have buttonwoods and buckeyes—a tree whose leaves will not fall too early."

F. H. L.

Try the American white ash.

NON-BLOOMING LILACS.

"My white lilac does not bloom? What can I do?"

Discard it for a named variety, such as Marie Le Gray. Even a small plant is sure to flower.

SUCCESS WITH ENGLISH HOLLY.

"Notwithstanding every care my English holly succumbed the first winter after transplanting. What are the best conditions?"

F. H. L.

Underlying moisture, not right around the roots, but within easy reach, is of great value to a holly.

On the Meehan Nurseries, two years ago, at least a dozen were planted near the foot of a slope. While on the slope, itself well-drained, there is, just beyond, a piece of ground that is always moist. The plants are partly shaded and sheltered, but other than this have not had the slightest protection. They have lived and grown beautifully.

GROWING MALLOW MARVELS.

My experience with Mallow Marvels has been very limited, but it has been of such a pleasant nature that I am constrained to talk about it in "open meeting." I have but two varieties—pink and crimson—and the past summer was the second season that they were in bloom. The flowers were unusually abundant, and I think it came about in the following manner:

When the Mallow Marvels had made a growth of about 3 feet I discovered, to my dismay, one day about the middle of June, that the leaves on several of the shoots had wilted. A somewhat hasty examination failed to reveal any real reason for this condition. The soil conditions apparently were favorable, and with the exception of the affected stems the plants evidenced sturdy, luxuriant growth. After a lapse of several days I decided to cut out the wilted parts for fear that blight was coming upon the plants, and in doing so I came across the cause of the trouble. About a foot from the tip I discovered a small hole in the cane, about the size of a pea. On breaking this open a small worm was discovered working its way upward, causing the shoot to wilt.

In an incredibly short space of time new sprouts appeared on the canes which had been cut off. Very little importance was attached to this second growth at the time, but when flowering time came it was seen that each one of the later sprouts had its full quota of buds.

The canes which had not been cut were first to bloom and the flowers were magnificent specimens. But when the second growth blossoms developed it was found that these were very nearly as large.

Taking it all in all, therefore, my experience with Mallow Marvels during the past summer has been most gratifying. The appearance of the little worms, though usually dreaded by horticulturists, seemed opportune in this case because there resulted a greater profusion of flowers. Next summer I may be tempted to resort to a little cutting, even though the worms should not put in an appearance. This may be considered an unscientific procedure, but after all the real source of pleasure one derives from the Mallow Marvels one gets from their gorgeous flowers.

In conclusion, let me add that the Mallow Marvel is deserving of a place in every garden, no matter how small. They thrive well in any sunny spot where a little care is given to soil conditions. Once well-planted they will yield an abundance of flowers year after year with very little attention.

J. E. GAPP,

Delaware County, Pa.

"In your GARDEN BULLETIN for February, 1910, pages 3 and 4, I am a little confused as to the meaning, "The vines throw outside laterals, which bear fruit"; "Buds springing direct from the old wood will not bear fruit." I judge that you leave

ORDINARILY we do not recommend the moving of large trees. They do not seem to quickly recover from transplanting.

Just at this time, however, we have a limited collection of unusually fine trees, not exceptionally large. Unlike the majority of large trees, these we speak of have had recent transplantings and very little check would occur in moving them.

These trees are from 12 to 25 feet high, depending on the kind, and run from 3 to 6 inches in diameter at the trunk.

Not one is overgrown and each is well formed and of pleasing appearance. Just the trees for immediate and effective results.

Among the collection are beautiful specimens of

American Horse Chestnuts	Green Ash
Chinese Cedrelas	Japanese Planera
Golden Weeping Willows	Bolleana Poplars
English Elms	American Lindens
Red Birch	Sweet Gums

and others as popular and ornamental

The prices we can name on these trees are exceptionally reasonable. It will be feasible to ship them at least 300 to 400 miles distant.

If you are in the least interested please write us *at once* as early visitors to our grounds frequently take these choice plants. Some will have to go later on to make room for incoming stock from Europe.

THOMAS MEEHAN & SONS

Germantown, Phila., Pa.

INTELLIGENT AND RELIABLE GARDENERS

There are any number of men, professing to be experienced, seeking situations as gardeners and superintendents.

In our own business we have had men on our nursery, assisting for some weeks, and later learn they have professed to be experienced, and cited their service at our establishment as evidence.

Are you in need of a gardener or superintendent? We have an up-to-date file of a limited number of real, valuable and thoroughly experienced men.

If you are seeking a gardener, write us. There is no charge made to either party. It is a satisfaction to us to see intelligent help employed on private estates.

THOMAS MEEHAN & SONS

Germantown, Philadelphia, Pa.

A combination of good effects. A most pleasing hedge with an equally attractive floral display.

EXCELLENT PLANTS FOR HEDGING

Have you a hedge to plant this spring? If so you should get from us our fine, well-rooted plants grown for such purposes. In this group is the well-known California Privet and the hardier kind for exposed positions.

You may prefer a less common hedge, in which case the other plants described will appeal to you. Here are the best you can buy in strong plants, well rooted and prices which compare favorably with any. **Special**—Sizes in quotation represent distance to set plants apart in the row.

PRIVETS

California. So well-known as to need no description.
1 to 2 ft., 1 year (6 in.) per 100, \$3.00
2 to 3 ft., 2 year (9 in.) " 5.00
3 to 4 ft., 3 year (1 ft.) " 8.00
4 year, extra heavy (2 ft.) " 17.50

Regels. As hardy as lbota and a half weeping habit which is decidedly beautiful. Even more important than with lbota, these are true Meehan-grown.

1-year (1 ft.) per 100, \$10.00
18 to 24 in. (15 in.) " 15.00
2 to 3 ft. (20 in.) " 20.00

Japanese Barberry. Bushy and compact in growth, handsome foliage, particularly when crimson in the autumn. Scarlet berries, too, are ornamental.

2-year plants (6 in.) per 100, \$ 5 00
3-year plants (9 in.) " 8.00
12 to 18 in (12 in.) " 10.00
18 to 24 in. (15 in.) " 12.50

Rose of Sharon or Althaea. As the above illustration shows, there are decidedly beautiful effects to be had from these plants. Grow almost anywhere. Upright and useful for a narrow hedge.

1 to 1½ ft. (9 in.) per 100, \$12.00
1½ to 2 ft. (1 ft.) " 15 00
2 to 3 ft. (18 in.) " 17.50
3 to 4 ft. (2 ft.) " 25.00

Japanese Roses. Get away from the hackneyed styles of hedges. Unusually beautiful effects are possible with these grand single pink and white roses. Foliage is rich green, leathery and insect-proof. Transplanted plants—not yearlings. The after-growth will show the difference.

1 to 1½ ft. (1 ft.) per 100, \$13.50
1½ to 2 ft. (1½ ft.) " 16.50
2 to 3 ft. (2 ft.) " 25.00

SPECIAL—We are also well stocked with other shrubs for hedging and quantities of grand evergreens.

THOMAS MEEHAN & SONS
Germantown, Phila., Pa.

only such laterals as are expected to bear fruit, yet further on you say, "It will always be necessary to prune off the branches that have borne the grapes." If this is true, what last summer's growth will be left to bear new wood for next year's growth?

"Again, you do not say what pruning is proper for the top of the vertical vines when they have reached the full length desired, etc., etc."

B. R. P.

UNIVERSITY, VA.

We are inclined to think that the confusion in grasping the meaning is due largely to the fact that this particular article treats on the training, rather than the pruning, of young vines, and bringing them from the planting stage to the point where they completely cover the trellis or arbor.

To thoroughly understand the subject it would be as well to completely ignore the fruit-bearing idea until the vine has reached the stage, as illustrated in Figure No. 2.

The horizontal portion of the vine, marked "A," represents the first year's growth. The perpendicular or upright branches represent the succeeding two year's growth, so that it would require three years to bring the vine to the stage as illustrated in the cut.

Supposing your vine to be in the stage as illustrated, each little bud along the perpendicular canes will send out a branch, say, early next spring, and if the vine is strong each one will carry a bunch of grapes. At the close of the summer, after the leaves fall, your vine, as it were, will be completely covered with these little branches, and it is necessary to prune them back.

When you do so, do not prune them right back to the horizontal cane, but leave a little portion, as shown in Figure No. 1. This portion is about an inch or an inch and a half long and usually carries two buds. Some gardeners cut them back to one bud, but we rather think it better to have two, so that if one happens to get broken off there will be another one to take its place.

The annual pruning consists of cutting these branches back, always leaving one or two buds of the previous year's growth.

It follows that, as you have to leave a small portion every year, it eventually forms spurs along the horizontal vines.

When the vine gets older, and if you should attempt to prune right back to the horizontal canes, the buds would naturally have to spring from the old canes, and while they may do so they would not be likely to bear fruit.

ERNEST HEMMING.

Will you kindly tell me the proper time and about how much to cut a honeysuckle vine on the front porch, west side of house; gets sun only last half of day.

I want to cut it now, about 2 or 3 feet off the ends. (The shoots are fully 10 or 12 feet in length.) I wanted to cut it right after flowering, but those who pretend to know say to wait until spring. I do not want to spoil it. Will you kindly answer soon. My wife and I are very much interested.

Will you also tell me how to encourage roses to grow in partial shade—climbing roses?

Hartford, Conn.

W. H. P.

Any time during the winter will be fairly satisfactory to trim the honeysuckle vines, but if left until early spring, before growth commences, there will be less likelihood the plants will be excited into premature growth.

Cut the vines back just as hard as you wish. You can cut them right to the ground and expect them to come up again.

To answer your question specifically: You can cut off 2 or 3 feet at this time without any harm, doing more extensive pruning later if you wish.

It is customary to trim such vines back to within a few inches of the older wood made in the year or two previous at least. This prevents an accumulation of growth in the upper parts.

One objection to pruning honeysuckle vines immediately they have finished flowering is there will be a great amount of growth during the same season following the cutting, and the vines will be somewhat unkempt for the next year. The winter pruning is usually the most satisfactory from the standpoint of neatness.

The only suggestion we can make that will encourage climbing roses to grow in partial shade is to keep the soil fertile—an abundance of water in the growing season and the ground well-enriched. The obstacle to flowering usually is weak growth, due to the absence of sunlight. You will have to encourage stronger growth by artificial means.

S. M. M.

Shrubs for Screening

(CONTINUED FROM PAGE 9)

others. Bears showy white flower heads in late May or early June, followed by fruit late in the season.

Prunus Pissardi. Purple-leaved Plum. (7 to 10 ft.). A splendid upright growing shrub or small tree, purple-red foliage. Holds its color probably better than any other purple or red tree

GOOD STRONG SHRUBS

not bulky—suitable for
shipping to distant points.

Meehan-grown shrubs are in big demand, and to supply a second size or medium grade to the man who is not in a hurry for results, we have the following special list to offer.

These shrubs have been just as carefully grown as our larger plants, and all are vigorous and well-rooted.

They are not, however, bulky in size or heavy in weight.

Just the chance to get some fine Shrubs at a nominal shipping cost.

Here is the list:

Bush Dogwood	2 to 2½ ft.
Pearl Bush	2 to 3 ft.
Snowdrop Tree	3 to 3½ ft.
Japanese Roses	2 to 2½ ft.
White Hydrangea	1½ to 2 ft.
Purple Callicarpa	1½ to 2 ft.
American White Hawthorn	2 to 3 ft.
Indigo Shrub	1 to 1½ ft.
Indian Currant	2 to 2½ ft.
Washington Thorn	2 to 3 ft.
Japanese Barberry	1½ to 2 ft.
Bush Honeysuckle	2 to 3 ft.
Round-leaved Snowball	2 to 2½ ft.

PRICES

35 cents each

10 in any assortment,	\$ 3.00
25 " " "	6.00
100 " " "	22.50

THOMAS MEEHAN & SONS
GERMANTOWN, PHILA., PA.

Genuine Bargains in FINE SPECIMENS

Here are bargains for the owner of a garden whether it be large or small.

Throughout our nursery we have plants which at times are better disposed of at a sacrifice than standing in the way of new planting.

This list is composed of just such plants. If you are in the market the prices we have named will interest you.

Act at once—quantities in many cases are limited.

Where quotations are named for quantities, no less number will be sold, and no prices are subject to any discount other than our usual five per cent. for cash with order.

In ordering you must mention this offer or pin it to your letter, to secure rates.

PUSSY WILLOWS. Big bushes, just suited for screening or planting in the rear of shrub borders. It is too bad there are only a few to be distributed. 8 to 12 feet, extra bushy, **\$1.00 each.** Not to be duplicated elsewhere for \$2.50.

GOLDEN WEEPING WILLOWS. Bright yellow bark and the graceful weeping habit of the well-known type. Only a few, but they are fine. 8 to 10 feet, extra bushy, **\$2.00.** Worth at least \$3.50.

ASH TREES. We have some very fine varieties of English Ash that do not vary enough from the common type to make them distinct. Excellent for sidewalk or lawn planting to secure shade. Order at once if interested. They will go quickly at the price named.

8 to 10 feet, fine young stock, **75 cents each,** worth \$1.00 to \$1.25 at least.

1½ to 2 in. caliper, **\$1.00 each; 25 or more at 90 cents each.**

2 to 2½ in. caliper, very fine, worth from \$2.00 to \$2.50 each, while they last, **\$1.50 each.**

GOLDEN AND FLAMED BARKED WILLOWS. Right away you can get results from these big, bushy plants. 8 to 10 feet, grand, bushy specimens, **\$1.00 each flat.** If they are not worth at least double the price we are greatly mistaken.

GREEN JAPANESE MAPLES. Very fine, large, bushy specimens. A shame to sell them below their real value, but they are scattered over some valuable ground. 5 to 6 feet and equally as broad. Were originally offered from \$7.00 to \$10.00. While they last **\$5.00 each.** Only 21 in the lot.

BUSH-FORM DOGWOODS. We have some very fine, bush Dogwoods. As you know they are fine for shrubby borders and one of the best class of shrubs for shaded positions. 5 to 7 feet, very fine and bushy. **50 cents each,** well worth triple the price. Lot of 25 of the best for **\$10.00.**

THOMAS MEEHAN & SONS
Germantown, Philadelphia, Pa.

or shrub. In spring bears blush-pink flowers, which harmonize with the color of the unfolding leaves.

A SELECTION OF OPEN GRACEFUL SHRUBS FOR MAKING A VEILING SCREEN.

Exochorda grandiflora. Pearl Bush. (8 to 10 ft.). Allied to the Spiræas, it has somewhat of the same habit. Bears pure white, star-shaped flowers, in clusters. Spreading and open.

Cratægus oxyacantha. (*C. Monogyne*) English Hawthorn. (12 to 15 ft.). Of the number of Hawthorns, this class is generally preferred for the snowy flowers. Graceful habit, with nicely hung branches. Double-flowered forms are to be had in pink, white and scarlet (var. *Pauli*).

Cornus sericea. Silky Dogwood. Shade. (6 to 10 ft.). Spreading, with purple-red branches. Leaves dark green above, paler beneath. Creamy white flowers in flat cymes, open in the early summer. Fruit blue or bluish-white.

Cornus florida flore rubro. Pink-flowering Dogwood. (2 ft.). Shade. Like the white variety in habit. A superb effect in color contrast may be had by planting them side by side or one slightly to the rear and to the side of the other. Both have the brilliant red berries and autumn foliage.

Amelanchier Botryapium. Showy Mespilus. Juneberry. (15 to 20 ft.). Bears a profusion of small white star-shaped flowers in April, followed by edible purple berries.

Chionanthus Virginica. White Fringe. (10 to 12 ft.). Shade. Large leaves for a shrub, glossy and of great substance, giving a very handsome effect of dark green. Bears loose panicles of cream-white fringy blossoms in late May. Enjoys a moist location, but does not demand it.

Caragana arborescens. Siberian Pea. (8 to 10 ft.). Compound leaves. Bears clusters of yellow pea-shaped flowers in May or June, followed by miniature pea-pods. Resembles Laburnum.

Tamarix. Tamarisk. (10 to 12 ft.). Several varieties are good for open filmy screens. The feathery foliage is distinct from any other in its airy gracefulness.

T. Africana (parviflora) bears pink flowers along the stems at the close of May.

T. Gallica (pentandra) flowers pink in early summer.

T. plumosa (Japonica or Juniperina) flowers pink in the spring.

From the Pilot

The growth of advertising during the past decade has been phenomenal and its power has assumed such proportions as to seem incredible when explained to the uninitiated.

In the wonderful development of advertising—the good, clean kind—there have crept in many evil forms to greatly depreciate the general value of the honest kinds.

Conditions therefore demand that honest advertisers combat these negative conditions and the result has been a fight for honest publicity.

In the horticultural field misrepresentation has assumed at times such supremacy that straightforward, honest statements were classed with the exaggerated, and little confidence placed in a seedsman's or nurseryman's catalogue statements.

Since 1853, when the late Thomas Meehan founded the Meehan Establishment, until the present, one strong foundation stone has been exactness in statement.

It was this spirit pervading the business which resulted in their catalogue being the first to offer plants by size. It was the reason for declining to use false color plates, and finally the adopting of a final pricing system—unique with them.

MEEHANS' GARDEN BULLETIN.

This publication is issued under the strict censorship of S. Mendelson Meehan, and we wish to state right here that every statement made in it we are ready to back up.

We wish to make this statement emphatic with respect to the many advertisements in this number—advertisements that will stand every test.

Evergreens Shedding Leaves

The owner of a nice evergreen, until experience allays his fears, is sometimes alarmed when the tree sheds its leaves, or "needles."

In reality no tree is truly evergreen in the sense of retaining its leaves forever.

Some are barely more than deciduous, losing the old leaves within the year a new crop is produced.

The beautiful Evergreen Magnolia of the South, which Northerners so much admire, is in disfavor by many because it is constantly shedding old leaves and making a dirt over the lawn.

Each evergreen, however, has a regular period of years for retaining leaves, and the loss of them is not haphazard, except for some disturbance of root or ill-health, and these are considerations to guide those who may have in mind a planting of them.

S. M. M.

"Great-Big" Shrubs

You can get quick, immediate results from these "special" shrubs we have to offer.

They are above the usual grades and are particularly fine in form and vigor.

For screening, shrub-border planting, or as individual specimens, they are sure to please.

Carefully note the good size of all of them, and the high quality of the selection, and decide to let us send you the group.

\$10.00 Collection

2 Meehans' Variegated-leaved Althaea	4 to 5 ft.
2 Golden Bells	4 to 5 ft.
2 White-flowered Bush Honeysuckles	4 to 5 ft.
2 Pink Spiraea Billardi	4 to 5 ft.
3 Early-flowering Hydrangea paniculata	4 to 5 ft.
2 Spirea callosa	5 to 6 ft.
2 Hungarian Lilacs	4 to 5 ft.
3 Mock Oranges	4 to 5 ft.
2 Viburnum tomentosum	4 to 5 ft.
3 Stephanandra flexuosa	4 to 5 ft.
2 Persian Lilacs	4 to 5 ft.

25 shrubs, easily worth \$13.50

\$5.00 Collection

1 Mock Orange	4 to 5 ft.
1 Golden Bell	4 to 5 ft.
1 Hungarian Lilac	4 to 5 ft.
1 Chaste Shrub	4 to 5 ft.
2 Early-flowering Hydrangea	4 to 5 ft.
1 Meehans' Rose of Sharon	4 to 5 ft.
1 Stephanandra flexuosa	4 to 5 ft.
1 Persian Lilac	4 to 5 ft.
2 Bush Honeysuckle	4 to 5 ft.
1 Pink Spiraea Billardi	4 to 5 ft.

12 shrubs, worth at least \$6.75

THOMAS MEEHAN & SONS
Germantown, Philadelphia, Pa.

A Valuable Book of 100 Pages

If you are intending to set out hardy trees or plants this Spring, whether one or a thousand, be sure to have us send you this valuable price list.

It is a convenient handbook of prices on a most complete collection of desirable and

dependable stock.

It is also an honest book in its claims and statements.

Send today for a copy—it is *free for the asking*.

THOMAS MEEHAN & SONS
Germantown, Philadelphia, Pa.

EXPERIENCED GARDENER, German, 40, married, 3 children, seeks a situation as head gardener or Superintendent. 25 years experience in landscape work, gardening, greenhouses, etc. Excellent references. Address P. W., care of Meehans' Garden Bulletin.

Empress Tree—*Paulownia imperialis* ERNEST HEMMING.

For rapidity of growth nothing quite equals the Empress tree in a young state. In fact, it grows so quickly that the trunk formed is not hard enough to stand the cold weather of the first winter. Newspapers wrapped around the trunk are sufficient to protect it.

Just imagine a shoot coming up from the ground 12 to 14 feet high and 2 to 3 inches in diameter in one growing season. This is what the Empress tree may do.

Gardeners take advantage of this and plant it in sub-tropical bedding. They plant two-year-old roots, cutting the stem off at the ground to get this quick, handsome, bold growth to use in combination with such plants as the Castor Oil Bean, Canna, Caladium, etc.

If trees are wanted for lawn or other planting to grow into large specimens it is better to get from the nurseryman one that has already had its trunk formed, as the winter killing is likely to make the tree ill-formed, unless properly looked after.

When the trees are several years old they are quite hardy.

The leaves are very large, something of the shape of the Catalpa. The flowers are extremely showy, dark purple, and suggest the Horse Chestnut in their arrangement. Another distinct feature are the seed pods, which remain on the tree all winter, and are to be seen at the same time as the flower buds which are formed the year previous and so in evidence at the same time.

Gladioli of the Finest Strains

Within the past 5 years hundreds of new Gladioli have been introduced. To select from the catalogue of a specialist is an unsatisfactory task for the uninitiated.

However, there are a few recognized as the very choicest; it matters not how many other new forms there are. They are like the Jack Rose—sure to please always.

Here are some of these dependable, superb kinds. No one need hesitate to select them.

For use in the formal garden border or massed these wonderful flowers are invaluable; especially fine for cutting.

Silver Trophy Strains

In these strains are some exquisite shades and the three groups give a choice of general colors.

Group No. 1—Scarlet Shades. Newest reds, scarlets, and crimson. Wonderfully bright and showy.

\$3.00 per 100.

Group No. 2—Light Shades. All shades of cream and yellow, including white. Many beautiful combinations relieved by dashes of rich color.

\$4.00 per 100.

Group No. 3—Blue Shades. Wonderfully beautiful shades of lilac, heliotrope, blue, and allied colors. Not obtainable in the cheap kinds.

\$5.00 per 100.

Groff's Original Hybrids

The amateur can secure great satisfaction from these hybrids. They are the original introductions of Mr. Groff, and certain shades from pure white to the darkest red and crimson. Flowers are large, well formed, and properly arranged upon the spikes.

\$1.50 per 100; \$12.00 per 1000

THOMAS MEEHAN & SONS, Germantown, Philadelphia, Pa.

A Vine for the City

Dust and Smoke of the City Have Little
Effect on this Vine

WILLIAM LAMB.

The Ampelopsis is one of the most useful hardy vines. What great improvement might easily be wrought in appearance and value not only in city houses, but those of suburban towns and country districts as well, with a few of these plants to soften the hard angles and break up the flatness that so often prevails.

The best plant, and the one most generally used for this purpose, is *Ampelopsis Veitchii*, the well-known Boston or Japanese Ivy.

Among the chief features in favor of this plant, it clings closely to the wall or other support by means of its disc-bearing tendrils, requiring considerable force to tear it away, thus no straggling vines are seen hanging down or bare places on the wall once the Ampelopsis has grown over it.

Dust, smoke and other conditions incidental to cities so disastrous to plant life, have little effect on the growth of this plant.

It is beautiful at all seasons, the bright-green foliage of early spring changing to dark green during the summer and again to the lively fall tints of red and orange. Even the delicate tracery of its leafless stems in winter is attractive.

Ampelopsis Virginica or *quinquefolia* (Virginia Creeper) is a stronger grower with large "five-fingered" leaves, more suitable for growing on fences, garden walls, posts or masonry entrances to drives, walks, etc., than on buildings, owing to its loose habit of growth. There are many different forms of this native vine, all are beautiful, especially in autumn, when the effect of the brilliant foliage is glorious.

Pot-grown plants are most useful for planting, especially in the small spaces usually found about city houses. Ampelopsis does not require particularly good soil, and will thrive under adverse conditions, such as in the dry soil generally prevailing close to the house wall.

Before planting remove at least a cubic foot of the old soil and replace with good loam. A well-grown pot plant when knocked out of the pot will have a network of fibrous roots, covering the outside of the ball of earth. Loosen up these roots at the bottom before planting, as they will grow out into the fresh soil more rapidly than if left matted together.

After planting, water thoroughly and as often as required until the plant becomes established in its new quarters.

The cost and care of these plants is trifling compared with the improvement obtained in the appearance of the home, whether in the city or country.

These roses we offer are in every particular as fine, bushy and vigorous as this plant. It hardly does them justice. All will flower abundantly for you.

Roses of a Dependable Kind

It is one thing to see beautiful illustrations of roses in a catalogue and another to grow them and have them flourish on your grounds and produce the same results.

To-day there are thousands of varieties—in fact, so many that the best posted authorities fail often in identifying by flower.

Generally speaking, the majority of garden owners want a collection of good dependable kinds to have a fine showing in June and the months to follow, and to that class we are in a position to serve their needs to a point that means positive satisfaction.

We do not handle mailing sizes or budded stock, but confine ourselves to the good-sized plants, grown on their own roots and ready to go ahead and give a good account of themselves at once.

Then, too, we do not go in for a confusion of varieties, but in our lists you find those tested, well-known kinds that need little description, as they are on every one's tongue in the month of June.

If you are seeking the best to be had in roses, come to us. If you do not know just what you want, explain the results you seek, and we will give you the best that money can buy.

June Roses. These need little introduction. They are the extra large, full double flowers, among which is Gen. Jack. The big display in June is the main one. A few flowers appear later from time to time.

In our collection are Gen. Jack, John Hopper, American Beauty, Clio, Frau Karl Druschki, Magna Charta, and others.

Monthly Roses. These are the ever-popular kind, Flowers begin to come in June, and the show continues until late autumn.

Our collection contains such favorites as La France, Hermosa, Kaiserin Augusta Victoria, Gruss an Teplitz, Killamey, Liberty, Clothilde Soupert, and others.

BIG POT-GROWN PLANTS

50 cents each	10 for \$ 4.00
25 for \$10.00	50 for 18.00

THOMAS MEEHAN & SONS
Germantown, Philadelphia, Pa.

Tree-Shrubs

(CONTINUED FROM PAGE 18)

Plant the Sweet Gum

It possesses so many fine qualities and has few if any bad points.

If you have room for only a half-dozen trees, let one of them be a Sweet Gum. It stands in the front ranks of ornamental trees.

The symmetrical, pyramidal form appeals to everyone, and the rich, green foliage, distinctly star-shaped, completes the picture.

However attractive the foliage is during spring and summer, the autumn show almost defies description. The leaves turn to crimson, yellow, bronze and intermediate shades, producing the most gorgeous show of all trees.

The Sweet Gum likes a moist, rich soil, but fortunately will thrive almost anywhere. It is hardy even north if given a sheltered position.

Spring is the season to plant it, and be sure to get well-rooted stock. Never have we had stock quite the equal of that which comprises our spring supply.

Straight, symmetrical, well-branched and (mark this well) all are abundantly rooted, the result of frequent transplantings. Let us have your early order that you may get some of these fine specimens.

These trees run from 8 to 15 ft. in height:

	Each	Per 10
1 to 1½ in. caliper	\$1.75	\$14.00
1½ to 2 in. "	2.50	20.00
2 to 2½ in. "	3.50	28.00
2½ to 3 in. " fine	4.00	32.00

THOMAS MEEHAN & SONS
GERMANTOWN, PHILA., PA.

plant is very attractive with its sweet-scented white flowers. The foliage has a disagreeable odor, but only when handled. A rare plant.

Cornus alternifolia (Blue Dogwood). The flat heads of small, white flowers are followed by blue-black berries in August. A very attractive plant in manner of growth and foliage.

C. florida. The well-known White Dogwood. The clusters of red berries which follow are as pretty as the flower bracts. The Pink Dogwood is the same as the White one, but for its beautiful deep, pink flowers.

Crataegus coccinea. This is a large fruiting Hawthorn about half the size of a Crab Apple. Very ornamental. The white flowers appear in May.

C. cordata (Washington Thorn). The flowers of this thorn come a little later than the others, and are followed by clusters of beautiful red berries about the size of a large pea.

C. crus-galli (Cockspur Thorn). This plant has long thorns and grows more dense than the others, which make it a good hedge plant.

C. oxyacantha (English Hawthorn). This Hawthorn, single white, its double red, white and scarlet varieties all make good plants for ornamental planting. The plain English species makes a good hedge plant.

Laburnum vulgare. The Golden Chains of pea-shaped flowers are very attractive. An English favorite.

Prunus Pissardi (Purple Plum). The foliage is a blood-red when new growth starts and changes to a reddish-purple later in the summer.

Robinia hispida. This plant with its clusters of pink pea-shaped flowers is much admired.

Halesia tetraptera (Snowdrop Tree). The profusion of white flowers, resembling snowdrops, in May, followed by four-winged corky seeds, are very ornamental.

Photinia villosa. Clusters of white flowers in May and followed by bright-red berries in October.

Styrax Japonica. A beautiful shrubby tree with bright light-green foliage and sweet-scented star-shaped flowers in May.

Viburnum Lentago. A slender plant with shiny foliage and flat heads of flowers followed by black berries. Colors well in the autumn.

V. prunifolium is of the same habit, but makes a more spreading plant. It colors well in the autumn.

Special Feature Shrubs, Etc.

(CONTINUED FROM PAGE 6)

EXAMPLE (5), GROUP OF 9 PLANTS.

- 1 *Styrax Japonica*,
- 1 *Elæagnus longipes*,
- 1 *Rhus glabra*,
- 2 *Forsythia Fortunei*.
- 1 *Viburnum plicatum*,
- 1 *Spiræa Anthony Waterer*,
- 2 *Berberis Thunbergii*.

CIRCULAR AND ELLIPTICAL BEDS.

It is essential that the beds be of a size to accommodate at least twenty to thirty plants. Especially is this so if it is desired to have a variety of shrubs, so that there may be three or more of each kind in it.

By so doing a much better effect is reached than if the bed be filled in with one of each variety. Many an otherwise well-placed bed is spoiled by too great a mixture.

Some of the very best and striking effects are gained by the exclusive use of one kind of shrub only, and in this case the bed may be smaller, sufficient say to hold twelve plants.

Imagine a bed of the pretty Star-shaped Magnolia (*M. stellata*) in April. The effect is

heightened when Yellow Crocus is used as a carpeting. A study in white and gold.

Rich, too, is the sight of *Forsythia suspensa* in bloom, carpeted with the pretty little blue *Scilla Sibirica* or with *Muscari cæruleum*, grape hyacinth. A study in blue and gold.

Other good effects are produced in the use of *Spiræa Van Houttei*, *Spiræa Thunbergii*, *Hydrangea paniculata grandiflora* and *Caryopteris Mastacanthus*.

Azalea mollis and *Pontica*, too, used in this way are highly effective. Fill all the available spaces between the plants with bulbs of Snowdrops and *Lilium speciosum*. The former for early spring, and the latter for summer and early fall display.

Other examples might be cited, but this perhaps will suffice to show the desirability of this mode of planting for garden adornment.

Get Ready to Plant

Plan your work for the spring at this time and do not let the matter slip by until spring is upon you.

Your order for plants, to get the best attention should be in hand early in March at least, before then if possible.

Grand Japanese SNOWBALLS

At last we have a big, fine supply of the ever popular Japanese Snowball.

It is no wonder it proves to be so popular. Unlike the old-fashioned form, it has in the first place handsome foliage, not only during the spring and summer when it is a rich, dark green, but as it takes on coppery bronze tints in the autumn. It is also not subject to insect troubles as are some of the others.

Look at the flowers in this illustration to see something attractive. All fine, extra large and perfectly double, being 9 to 12 inches in circumference. The flowers set snugly on the branches and do not hang limp. They last well after becoming full blown, which is not the case with the old-fashioned

kind. The Japanese Snowball is hardy as far north as Massachusetts and in the middle west to Missouri, often farther north if given a favored position. Grown as a specimen, this snowball is admirably suited for use on the lawn in conspicuous positions, attaining a height of eight feet or more. Excellent as well for grouping with other shrubs in small beds or borders. Unlike so many shrubs, it gives pleasure from early spring until late fall.

Our plants are certainly fine. Grown on the northern slope they have become hardened to severe conditions and will therefore do well in almost any situation. Here is your chance to get some fine plants, especially if you want them in quantities, at reasonable rates.

THOMAS MEEHAN & SONS
GERMANTOWN, PHILA., PA.

2 to 3 ft., extra bushy, 50c each, 10 for \$4.00, 50 for \$15.00
4 to 5 ft. 50c each, 10 for \$4.00
5 to 6 ft., fine 75c each, 10 for \$6.00, 50 for \$25.00
6 to 7 ft. \$1.00 each, 10 for \$8.00

Speedwell

Royal Scarlet Poppy

New and Rare Perennials of Great Merit

—for the interested garden owner

KNOWING how eager the lover of perennials is to learn of new or unusual perennials we name below some select kinds.

These are real treasures—plants which when in flower you'll call your friends in to see. If you have a garden, formal or old-fashioned, a border or even a small "patch," you will want them.

In all cases the plants we offer are good, strong ones, ready to give pleasing returns in flowers this season. No microscopic specimens.

Meehans' Mallow Marvels. Single bloom; illustrated in color on the cover of this number. Full description on the page following. A sterling plant of recent introduction. Two-year old roots.

75c each. 5 for \$3.00. 50 for \$25.00.

Bright Orange Helenium. Not new but seldom seen. It should be in every garden. Blooms in June, bearing great clusters of bright orange, daisy-like blossoms. Grand for cutting.

15c each. 10 for \$1.20. 50 for \$5.00

Henderson Speedwell. This is a grand perennial. Blue spikes of good size, like illustration. Excellent for cutting—long lasting.

15c each. 10 for \$1.20. 50 for \$5.00.

Blue Dropmore Anchusa. A grand perennial just introduced from Europe. Grows 4 to 5 feet high, and produces spikes of light blue or indigo flowers similar to Larkspur. Flowers all summer. Many plants are masquerading as this Dropmore variety.

35c each. 10 for \$2.70. 50 for \$12.00.

New Dwarf Polygonum. A compact, dwarf-growing plant. Good flowers and foliage, unlike the old *cuspidatum*.

15c each. 10 for \$1.20. 50 for \$5.00.

Royal Scarlet Poppy. Immense blood-red blossoms of the showiest to be had in Oriental Poppies. Here is a chance to get some fine stock.

15c each. 10 for \$1.20. 50 for \$5.00.

New Maroon Helenium. Quite distinct from the yellow and striped varieties, the flowers of this one are a dark red. Grows 4 feet. Late summer.

15c each. 10 for \$1.20. 50 for \$5.00.

Large-flowered Evening Primrose. Though dwarf, this plant is showy. The flowers are a clear, bright yellow, and four to five inches in diameter.

15c each. 10 for \$1.20. 50 for \$5.00.

"Erskine Park" Larkspurs. A new strain of great merit. Tall, strong-growing spikes, with flowers closely set on the stalks. Something new and distinct.

15c each. 10 for \$1.20. 50 for \$5.00.

Inula Brittanica. A sterling plant of dwarf growth. Flowers freely, the blossoms a good, bright yellow, coming from July until September.

15c each. 10 for \$1.20. 50 for \$5.00.

Baptisia Australis. Not new to growers, but a rare plant in private gardens. Beautiful rich blue, pea-shaped blossoms, borne in spikes. Very pretty foliage.

15c each. 10 for \$1.20. 50 for \$5.00.

"A Neilson" Chrysanthemum. A superb hardy 'mum. Silvery pink, reflexed petals, flowers quite large. A strong grower. Very hardy. Not obtainable elsewhere.

15c each. 10 for \$1.20. 50 for \$5.00.

Special Group Collections

We will furnish 5 each of the dozen sterling plants offered above, 60 plants in all, \$9.50

Or we will supply 25 plants of each 300 in all for \$45.00.

(Both offers include the famous Mallow Marvels)

THOMAS MEEHAN & SONS
Germantown, Phila., Pa.

Discouraging Dahlias

It seems too bad to enter a complaint against the Dahlia, one of our cherished friends of the old gardens. A person who would do that might be expected to be caught blackening the reputation of his brother, yet there is excuse for much disappointment over the more recent behavior of the Dahlia.

It does not blossom as it used to. Often, unless it has the best of positions in the garden, with abundance of water and fertility, it will not blossom at all. In my shady garden it seldom even tries to blossom, yet for old recollection's sake I still plant it and hope for better results. I have seen it in Buffalo parks, planted in open order, with the surface of the soil covered with half-rotted coarse manure, showing blossoms from only about half the plants during the whole season. So I do not think my handling of it is to blame.

Some cultivators say there is an insect, a species of blister beetle, that is doing the mischief by gnawing the small buds, but I did not see an insect of any sort on my plants last summer, and they bore no evidence of having been eaten.

I am afraid that the difficulty is of a constitutional origin. The Dahlia has become a root crop to a degree that is hurting it as a flower, just like the potato. Look at the potato fields in Europe, and they will be found to show blossoms like a flower garden, but we have the idea that the potato should give its entire energy to producing tubers, and have cultivated the blossoms nearly out.

They say that some people eat the Dahlia tuber, but most of us would likely call it ill-flavored. If it should be found palatable by some method of cooking I would undertake to raise it as a root crop, and by training it to a single stem I believe I could make it out-yield the potato.

So I would like to ask the experts if there is not some way of cultivating out this excessive root growth and restoring the blossoms. Instead of a dozen big tubers, where the plant has been vigorous, three or four would be plenty, and then there should be a return of the old abundance of flowers. I have thought that it might be possible to bare the roots at the time of setting the tubers and rubbing most of them off, but I am not expert enough for such work.

Now and then I see the old favorite so situated, or so minded, that it is producing all of its remembered profusion of blossoms, and I realize that its glory has not departed, but has been some-

Good Sized Fruit Trees

Big fruit trees are in demand, and while what we have are extra large, we have tried to secure even larger from every source but have failed. They are not to be had in healthy condition.

However, what we have is beautiful stock in sizes above the average, and there are other merits worth special mention.

Everyone is absolutely free from scale or disease of any kind. They are as true to name as careful labelling can make them. All are dependable kinds known to be successful over a wide range of territory.

Here is the condensed list—make up your order and reserve what you need *at once*. Some classes are getting scarce.

Standard Apple Trees. About 6 to 7 ft. high, good stout stems and well rooted.
75c each. 5 for \$3.00. 25 for \$15.00.

Cherries. Sweet and sour kinds, very fine.
75c each. 5 for \$3.00. 25 for \$15.00

Peaches. All free-stones. Early, medium and late kinds. Fine, clean stock, above the average in size.
35c each. 5 for \$1.35. 25 for \$6.75.

Standard Pears. Some of the best we have seen for a good while.
75c each. 5 for \$3.00. 25 for \$15.00.

Dwarf Pears. These are a blessing for the man with the limited yard.
50c each. 5 for \$2.00. 25 for \$10.00.

Plums. Both American and Japanese varieties. Free from disease, as stated before.
75c each. 5 for \$3.00. 25 for \$15.00.

Quinces. The real, old dependable orange variety. Fine stock. 50c each. 5 for \$2.00.

A full stock of very fine bush fruits, such as

Gooseberries Currants Raspberries
Blackberries Grapes

All at Regular Rates

Thomas Meehan & Sons
Germantown
Philadelphia, Pa.

how obscured by a bad habit. Who will do the flower-loving world a favor by restoring the Dahlia to its old ways?

JOHN W. CHAMBERS.

A Reply with Cultural Hints

This seems to have been a particularly bad year for Dahlias to bloom. I have noticed them in a number of places this season with coarse, thick stems and abundant, strong, healthy foliage.

Flowers were scarce and many of them only half-formed. Some of these plantings were situated in partially shaded places, while others were most favorably located in sunny positions; all were planted early in the season.

Our Dahlia roots were planted the last week in June. The soil was a sandy loam. No water was given at any time, except that which came to them naturally.

These plants produced a profusion of flowers from the time they began to bloom until the frost put an end to them; very few flowers were deformed.

The growth was not rank, as with those planted early in the season, nor did the stems attain the height, but *well-formed flowers were produced abundantly* by all forty varieties in this planting.

These plants were slow in making new tubers. When taken out early in November they were well-developed, but not so large or numerous as were those which had been planted in spring.

Planting so late was not done to experiment, to overcome a deficiency of bloom, or to retard an excessive growth of tubers, but simply to have dormant roots for late buyers.

The foregoing is written to show what Dahlias will do under somewhat adverse conditions, and is not advised as a method to use for best results.

The cultivation of Dahlias, planting the roots, their care and after-treatment in the field or bed, are most simple in every detail.

Many growers stick to the old-time method of planting the divided portions of the root clump at a time when all danger of belated frosts has passed.

This is the least expensive method, much practiced by amateur gardeners and often results in a superb lot of Dahlias, bearing abundant well-formed flowers, which fully repay the grower for time expended and care given in their cultivation.

Before planting remove all but one strong growing shoot, or this may be done after plant-

ing, when the shoots push through the soil. One single shoot will make a better plant than if several are allowed to grow, a rule which applies to any variety of Dahlia.

The distance apart to plant Dahlias depends very much on the variety to be grown. Three feet at least should be allowed between plants; dwarf-growing varieties could do with less, while tall, coarse-growing kinds should be given more space.

Dahlias do not require a very rich soil, as it tends to make them grow to plant and foliage rather than bloom.

A light, loamy soil, which has been manured and dug in the fall and then left rough over the winter, so the action of the frost will sweeten and pulverize it, will be found best for Dahlia culture.

An open, sunny position is the best location for growing Dahlias. After planting, the necessary cultivation required is staking and tying, hoeing to keep down the weeds and to keep the surface of the soil loose. During dry weather give frequent and thorough waterings.

Should the weather be wet in late summer run a spade into the earth on all four sides of the plant, about a foot away. This will cut off the outlying roots and have a tendency to force the plants to bloom.

Such methods are used by many growers to force plants or trees to bloom and fruit when they have a tendency to remain sterile.

To get extra large blooms, pinch off all surplus buds; and to encourage late blooming and stocky plants, pinch back until about the first of August.

WILLIAM LAMB.

Garden Plants with a History

Pyrethrum, the well-known insect powder, is the powdered flowers of *Pyrethrum roseum* or of *P. cinerariaefolium*. The first named is one of our nicest garden herbaceous perennials. California produces the best Pyrethrum under the name Buhach.

Hellebore, another insect powder, is of the popular Christmas Rose, *Helleborus niger*—not a true rose, but none the less interesting.

Orris root, from which a favorite tooth powder is made, is made from the rhizomes or roots of *Iris florentina*, one of our most charming "flags."

What intense interest might be secured from a portion of the garden given up to "plants with a history!"

Meehans' Prize Winning Hardy Chrysanthemums

A superb collection, made so by many years of careful work on our part

For some years we have been making a hobby of growing the real, old-fashioned, hardy chrysanthemums. At one time we had over a hundred different varieties.

Some of these were less deserving than others and we have slowly weeded out the second-class kind.

Here are thirty-eight varieties that cannot be excelled. They are the cream of the known kinds.

Plenty of the button kinds and an abundance of the varieties about the size of a silver dollar.

Our chrysanthemums are true to name and through the fact that they really are the best of the known kinds, they have received prizes annually from the largest fall chrysanthemum exhibits throughout the country.

Every garden should have a big display of these beautiful flowers. They are in their glory after all other bloom has disappeared. They are hardy, too, if you give them half a chance. Ask us for advice.

Here are our reasonable prices for them. We make delivery after May 1st, 1911.

SUPERIOR POT GROWN PLANTS

In variety 15 cents each. Postpaid 20 cents. 10 for \$1.20. 50 for \$5.00 250 for \$18.75

Name	Size and Color	Height	Name	Size and Color	Height
Autumn Queen	—Large, rosy pink	Medium	Souer Melaine	—Large, pure white	Medium
A. Neilson	—Large, silvery pink	Tall	St. Illoria	—Very large, silver pink	Tall
Baby	—Golden yellow, button	Dwarf	Strathmeath	—Large, clear pink	Medium
Bedouin	—Small, garnet and white	Dwarf	Stratagem	—Large, crimson, shaded gold	Medium
Brown Bessie	—Rich brown, button	Medium	Sunset	—Medium, single burnt orange	Medium
Eagle d'Or	—Medium, clear yellow	Tall	Victor	—Medium, claret	Medium
Edna	—Medium, glowing pink	Dwarf			
Fire Ball	—Medium yellow, tipped red	Medium			
Flora	—Small, golden yellow	Dwarf			
Fremy	—Large, beautiful terracotta	Medium			
Globe d'Or	—Large, bright lemon	Dwarf			
Golden Mlle. Martha	Bright orange, button	Tall			
Golden Pheasant	—Small, rich yellow	Medium			
Goldfinch	—Small, gold shaded crimson	Tall			
Grandeur	—Large, golden bronze	Medium			
Julia Lagravere	—Large, rich maroon	Tall			
Kadar	—Medium, mottled crimson, etc.	Dwarf			
Ladysmith	—Medium, rosy lake tinged salmon	Tall			
L'Ami Conderschlerdt	—Sulphur white, button	Dwarf			
La Favorite	—Small, rose pink, shaded white	Medium			
Little Pet	—Small, claret flower	Tall			
Lovely	—Small, bright pink	Tall			
Maid of Honor	—Medium, deep rose	Medium			
Maid of Kent	—Medium, white	Tall			
May Suydam	—Medium, rich bronze	Medium			
Model	—Small, round, full, white	Tall			
Mrs. Snyder	—Large, rich yellow	Medium			
Mrs. Vincent	—Large, rich magenta	Tall			
Nellie Rainsford	—Small, salmon, tipped red	Dwarf			
President	—Large, deep, violet, rose	Tall			
Prince Victor	—Large, brownish red	Tall			
Rosamond	—Small, purplish white	Medium			

The "Big Five" Collection

Do you want a few, distinct kinds—here are the leading five of all listed on this page?

Each is distinct from the others and will look well grouped together.

Julia Lagravere. Large rich maroon
 Souer Melaine. Large pure snowy white.
 Prince Victor. Large rich brown.
 Golden Mlle. Martha. Medium golden yellow.
 A. Neilson. New large pink with silvery reverse petals. Flowers loose and informal in arrangement.

Five plants of each of the above varieties, twenty-five in all, for **\$3.00**

Ready for delivery May 1st.

THOMAS MEEHAN & SONS, Germantown, Philadelphia, Pa.

Meehans' Mallow Marvels

Are the richest and best creation of the century. Not another novelty or introduction for years equals the Mallow Marvels in value or popularity. They amaze all by their sterling qualities.

One salesman last year said he sold them to every customer who came into the store without any effort. Everyone recognizes how far superior they are to all other Perennials for creating **distinct striking effects.**

Do you know them?
Have you seen their wonderful blooms?

Blossoms 8 to over 10 inches in diameter in crimson, rich blood red, and soft, pleasing shades of pink, perfectly hardy, will grow in almost any good soil and are almost exempt from disease and insects.

Order some this Spring, you'll get results right away—in August, and what is more, you'll be pleased.

Get them from us—we are the originators and you are sure of getting the genuine plant.

Big two year roots in shades of red, pink or crimson, 75c each.

10 for \$ 6.00

50 for 25.00

Extra sized roots—will produce extra large bushes, \$1.00 each

10 for \$ 7.50

50 for 32.50

Why not have such a real, helpful guide at hand each month and keep posted on the best and most up-to-date horticultural information.

"Meehans' Garden Bulletin" mailed monthly, for one year for 50 cents. It is a clean, up-to-date paper with no objectionable advertising within its pages.

Why not sit down and send in your subscription at once?

Here is a paper for the Amateur Gardener

You need not be in the least acquainted with plants or horticultural topics to get real help and value from

"Meehans' Garden Bulletin"

It talks to you in a **practical, easy, understandable** way, excluding technical terms and phrases. It gets down to "bed rock" facts, and you are enlightened to an extent not reached by the average garden publication.

Monthly there appear such articles at the following:

- "Tying the House to the Grounds."
- "Screening the Unsightly."
- "The Old-Fashioned Garden."
- "The Combination of Herbaceous Plants with Shrubs."
- "Practical Talk on Roses."
- "What Vines to Plant and Why."
- "Notes by a Landscape Expert."

Special Combination Offers

Do you intend ordering some Mallow Marvels this Spring? You should have them on your grounds to get a show in August.

If you do order and would like to receive the "Garden Bulletin" for one year at the same time, grasp the following special offers:

1 Two year Root of Mallow Marvels }
1 Year Subscription "Garden Bulletin" } \$1.00

3 Mallow Marvels (3 colors) }
1 Year Subscription "Garden Bulletin" } \$2.50

THOMAS MEEHAN & SONS

Germantown, Philadelphia, Pa.

Flowering Magnolias

of Our Own Growing

WHEN you buy Magnolias be sure to inform yourself about the quality of the plants. If there is need to get some plants of better quality than others it is in the case of Magnolias.

Magnolias similar to those we grow (unfortunately there are few) are possible to transplant with risk of loss reduced to a minimum.

The greatest of care is exercised, first in the growing and finally in the digging and shipping. You get plants as near perfect as possible. We lift as much soil with the roots as they will hold.

On the other hand, there have been great losses in transplanting Magnolias, due almost entirely to poor stock and indifferent handling. Here are some beautiful plants we have, in the very choicest variety, with vigor that insures success, if carefully planted.

Let us know your needs and we will see that your order gets early and careful attention.

Garnet-flowered Magnolia (*Magnolia Soulangiana nigra*)

A new and decidedly attractive variety with very deep red blossoms, similar in form to the pink one of which it is a variety.

	Each	Per 10	Per 50
1½ to 2 feet	\$1.25	\$10.00	\$40.00
2 to 2½ feet	2.00	16.00	67.50
2½ to 3 feet	2.50	20.00	

Pink Magnolia (*Magnolia Soulangiana*)

This well-known, large-flowered, light pink Magnolia needs no description. It is seen in almost every garden of any size or consequence. Our plants are grand.

	Each	Per 10	Per 50
2 to 3 feet	\$1.25	\$10.00	\$40.00
3 to 4 feet	2.25	18.00	75.00
4 to 5 feet	2.75	22.00	90.00
6 to 7 feet	3.75	30.00	125.00

Purple Magnolia (*Magnolia purpurea*)

Somewhat shrub-like in habit. Produces purple blossoms after many kinds are through flowering. Not hardy in the extreme north.

	Each	Per 10	Per 50
1½ to 2 feet	\$1.00	\$8.00	\$32.50
2 to 3 feet	1.50	12.00	50.00
3 to 4 feet	2.00	16.00	67.50

Blood Red Lennei Magnolia

The large, cup-shaped blossoms are decidedly showy, being deep red on the outside, pure white inside. A superb kind.

	Each	Per 10	Per 50
3 to 4 feet	\$2.25	\$18.00	\$75.00

The beautiful, star-shaped blossoms of the dwarf, sweet-scented *Stellata* Magnolia.

Sweet Bay (*Magnolia glauca*)

In early June, following the others, this well-known Magnolia produces medium sized, cup-shaped, pure white blossoms which are quite fragrant. The foliage is rich and glossy, evergreen in the South, and almost so in the North. Scarce to get in good stock. These we offer are superb.

	Each	Per 10	Per 50
1 to 1½ feet	\$.75	\$6.00	\$25.00
1½ to 2 feet	1.25	10.00	40.00
2 to 3 feet	1.50	12.00	50.00

Yulan Magnolia (*Magnolia conspicua*)

Large, pure white, sweet-scented blossoms surpassing all others in beauty as a large, white Magnolia.

	Each	Per 10	Per 50
2 to 3 feet	\$2.00	\$16.00	\$67.50
3 to 4 feet	2.50	20.00	82.50
4 to 5 feet	2.75	22.00	90.00
5 to 6 feet	3.25	26.00	107.50
6 to 7 feet	3.50	28.00	115.00

Star-flowered Magnolia (*Magnolia Stellata* or *Halleana*)

Almost covering the plants with its shower of blossoms, this beautiful dwarf, bushy-growing Magnolia is one of the most ornamental. The flowers are tinted pink in bud, opening pure white and are delicately scented.

These plants of ours we will match with any in the country as being superior.

	Each	Per 10	Per 50
1½ to 2 feet	\$1.50	\$12.00	\$50.00
2 to 2½ feet	2.00	16.00	67.50
2½ to 3 feet	2.50	20.00	82.50
2½ to 3 feet, heavy	3.00	24.00	100.00
3 to 3½ feet specimens, \$4.00 each			

SPECIAL MAGNOLIA GROUP. These seven glorious Magnolias are most excellent for grouping as a special Magnolia group, remembering that *purpurea* and *stellata* are dwarf in habit. Here is a special offer, one each of the seven described, in the smallest size offered of each for **\$9.00**

THOMAS MEEHAN & SONS, Germantown, Philadelphia, Pa.

Superb *Blood-Red* Japanese MAPLES

This Spring we shall sell several large blocks of wonderfully fine Meehan-grown Japanese Maples, the equal of which cannot be found in another American nursery.

Imported Japanese Maples, though handled by a great many dealers, are not to be compared with home-grown stock.

We know, by experience, that it is impossible to buy at any price, plants that approach our home-grown stock.

Take these fine blocks from which we will sell this Spring, the plants in them are superb.

- Full and extremely bushy.
- Have been frequently transplanted.
- Are very well rooted.
- Fully acclimated.
- Far better color than the common stock.

A WORD OF PRAISE FROM ENGLAND

The Japanese Blood-leaved Maples you sent us are doing splendidly and are all you claimed. The color of the foliage is simply superb and richer than any of our English-grown.

GEO. H. MADDERN

Head Superintendent to T. Bedford Bolitho, Esq.
Trewidden Gardens, Cornwall, England.

These points indicate as far as description can the superior quality there is in these Meehan-grown plants.

You should, however, see these plants to really appreciate their great value. If you are near our nurseries this Spring, call and we will gladly show you the plants.

The rich, blood-red Japanese Maple should brighten every lawn and garden. It is so intense in color—especially in the strain we have, which has been commented on by many as being decidedly more intense in color than that of the ordinary stock. The vigor of our plants no doubt is the cause of this intensity of color.

As a single specimen, in groups of three or more, or grouped with other varieties, in any case you get decidedly beautiful effects.

Decide now to get some beautiful plants, that cannot be surpassed in quality—at very reasonable prices.

ORDER EARLY—Not after the season has advanced too far, as early planting of Japanese Maples is essential to good returns. Spring is the best season for planting all Japanese Maples.

Meehan-grown Blood-Red Japanese Maples

1 to 1½ ft.	\$1.00 each, 5 for \$4.00, 50 for \$32.50
1½ to 2 ft.	1.25 “ “ 5.00, “ 40.00
2 to 2½ ft. bushy,	1.75 “ “ 7.00, “ 60.00
2½ to 3 ft. “	3.00 “ “ 12.00, “ 100.00
3 to 3½ ft. “	4.00 “ “ 16.00, “ 132.50
3½ to 4 ft. “	5.00 “ “ 20.00, “ 167.00
3 to 4 ft. specimens	\$5.00 to \$8.00 each
4 to 4½ ft. extra	\$6.50 each, 5 for \$26.00
4½ to 5 ft. superb	\$8.00 to \$10.00 each

Japanese Maple Collection

Very few people know the decidedly beautiful effects possible in combining various varieties of Japanese Maples in a group.

The crimsons, greens and yellows always harmonize. Set a group out on your lawn and you'll be delighted with the effect.

Here is a fine selection for the purpose:

2 Japanese Blood-leaved Maples	2 to 2½ ft.
1 Golden-leaved Japanese Maple	1½ to 2 ft.
1 Green Polymorphum Maple	3 to 4 ft.
2 Red Fern-leaved Japanese Maples	1 to 1½ ft.
1 Green Fern-leaved Japanese Maple	1½ to 2 ft.
1 Ivy-leaved Japanese Maple	2 to 3 ft.

These 8 fine well-developed specimens, from 1 to 10 feet high, for \$13.00.

We have a grand collection of other varieties equally as good as the blood-leaved form. Ask for quotations and we will gladly send you full information.

THOMAS MEEHAN & SONS, Germantown, Philadelphia, Pa.