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*A Plea for
Hardy Plants*

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Landscape Designer of Country Estates

H. W. SHEPHERD

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A PLEA FOR HARDY PLANTS

KALMIA LATIFOLIA

A PLEA FOR HARDY PLANTS

With Suggestions for
Effective Arrangement

By *J. Ames* WILKINSON ELLIOTT

(Landscape Architect) II

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JAPANESE CRAB APPLE

INTRODUCTION

THIS book has not been written to teach the art of landscape gardening, but the need of it. The student of landscape gardening will find many excellent books on the subject, but the public hardly knows that there is such an art, and that good gardens and grounds, like good houses, are always the result of intelligent study and design.

The annual expenditure for suburban and country homes is enormous, and while an architect is always employed to design and plan the house, with but few exceptions the treatment of the grounds is intrusted to the nearest two-dollar-a-day jobbing gardener, or the owner is his own landscape gardener. The result is always unsatisfactory, although often the expenditure would have secured most beautiful effects if directed by skilled advice. The folly of this is more apparent when it is considered that fully fifty per cent of the cost of the better class of houses is expended with the desire of producing beauty; one dollar intelligently spent on the grounds will afford more beauty than will ten spent on the house, and the attractiveness of the house is greatly enhanced by the beauty and fitness of the grounds. I have endeavored to show this by good pictures rather than with much writing.

J. WILKINSON ELLIOTT

Pittsburg, September 10, 1902

MASS OF PERENNIAL PHLOX *good.*

RHODODENDRON ALBUM GRANDIFLORUM

A PLEA FOR HARDY PLANTS

IT must be remembered that my experience has been with a more western civilization, and some of my remarks may not have much force addressed to so enlightened a gardening community as that of Boston and its suburbs. Yet I am told there are some people in this neighborhood who persist, and at considerable outlay and trouble, in using thousands of tender bedding plants to make poor representations of inanimate objects. If this is true they cannot make the plea of not knowing better, for all about them are many of the best and most tasteful gardens in America—splendid examples of garden schemes in which the so-called bedding plants cut little or no figure.

There has been so much written and said on the subject, and the great advantages of gardening with hardy plants and shrubs are so apparent, as compared with tender bedding plants, that it seems a waste of time and words to make any argument in favor of one and against the other; but the argument is needed as much as ever, for it is an undeniable fact that nine-tenths of the ornamental gardening in America is still done with a few commonplace and uninteresting bedding

ROSA SETIGERA

plants. Think of the pity of it, that all this enormous annual expenditure should be wasted—an expenditure that leaves our gardens in the fall exactly as it found them in the spring,—bare earth, and nothing in it.

Is it because the people prefer bedding plants to hardy ones? You who know hardy plants know that this is not so. Who would prefer, let us say, a bed of coleuses or geraniums to a fine group of rhododendrons, or azaleas, or *Lilium auratum*, or Japanese anemones, or to the hundreds of fine things to be had in hardy shrubs and plants? Any one of these has a beauty incomparably greater than can be produced with the most lavish use of bedding plants. Then the bedding plants are a yearly expense, while an investment in hardy plants and shrubs returns the investor an annual dividend in increased size and loveliness. Every dollar spent for them secures a permanent addition

AZALEA NUDIFLORA

to the garden, and the time soon comes when the annual outlay can be devoted entirely to care and culture.

I know a gentleman who carried a fine stalk of *Lilium auratum* flowers into the office of one of the largest business houses in our city. Not a man in the office knew what it was, and all were unwilling to believe that it grew in his garden. They supposed it to be some rare and costly flower grown in a conservatory. Yet these lilies, and dozens of other things as fine, can now be bought as cheaply as bedding plants.

The people do not prefer bedding plants to hardy ones. They have no choice in the matter. They buy what the local florist offers and what they see in their neighbors' gardens. They are not sufficiently interested to make inquiries. They do not read the gardening papers; and, with few exceptions, the managers of the city parks, who should be educators of the people in gardening, are content with what might be called an annual pyrotechnical display of bedding plants, as it is of such short duration and little artistic value.

The popularity of bedding plants is happily on the wane. It occurs to almost everybody after a time that they do not get much for their money when they buy this sort of material; but I cannot say that hardy plants are gaining much. There is no considerable effort made to attract the public attention to their merits; and when some man, more enterprising than his neighbors, does take the trouble to hunt them up and do his gardening with them the result is not always happy. He is very apt to use them as he would bedding plants—that is, in formal beds cut out of the grass of the lawn. Of course, hardy plants do not lend themselves to this treatment, and it is one of their greatest merits that they do not. Better no flowers at all than that the lawn should be cut up in formal beds for their accommodation.

An objection often urged against hardy plants is their short duration of bloom, but this really is one of their greatest merits. Let us consider the garden that depends exclusively upon bedding plants for its decoration. It is usually the first of June before they can be planted, and it is well into July before they are effective; often by the end of September they are killed by frost, and every day during their short season of three months they are as unchanging in appearance as the carpets in our houses, and about as interesting.

On the contrary, the well-planned and well-planted garden of hardy

ROCK-GARDEN AND POOL AT WELLESLEY, MASS.

CHINESE WISTARIA

plants begins its season with earliest spring and terminates it not with the first light frosts of fall, but when November brings some real winter weather, and then only goes to rest to delight us afresh with the coming of another spring. Almost every day throughout its long season the hardy garden is changing with the changes of the season, something new is coming into bloom, and before it becomes monotonous its season is over and its place taken by some other flower equally beautiful and interesting but entirely different. Our garden is never tiresome; its past is a pleasant memory, its future a delightful anticipation, and its bloom an accurate calendar of the seasons. Is this true, or only fanciful writing? It is true, every word of it—hard but pleasant facts.

Snowdrops are in bloom with the first pleasant weather in spring; some springs they are in bloom during the first week in March. They are quickly followed by scillas and crocuses, and then comes the

season of tulips and narcissi, with their countless varieties. What a variety of form in the narcissi! What a wealth of color in the tulips! Their season is fully a month, and before it is done the early-flowering herbaceous plants are showing bloom and the flowering shrubs have begun a display that will end only with fall. By May scores of hardy shrubs and plants are in bloom—creeping phloxes, columbines, dionysiums, Oriental poppies, German and Siberian irises, and in shrubs, lilacs, early spireas, Japan quinces, magnolias, and Mollis and Ghent azaleas. We must not forget the hardy climbers, of which the clematis, in its numerous splendid varieties, covers a season of fully six months and with which alone a most charming and interesting garden could be made. June brings such a wealth of bloom that we are at a loss as to what to use and what to reject. Rhododendrons in many varieties and colors,

HERBACEOUS PEONY

kalmias, *Lilium candidum* and *elegans*, and hardy roses are the flowers, perhaps, that hold the greatest share of our admiration at this season, and if June gave us hardy roses alone, our garden should be satisfactory. The memory of a fine collection of hardy roses in full bloom is worth more than all the ribbon- and carpet-beds ever devised; and in saying this it is with full knowledge of the much-advertised rolls of carpet, vases, worlds of flowers, etc., which South Park, Chicago, exhibits to a wondering world.

I fear that much of the benefit of the example of Mr. Olmsted's and Mr. Codman's work at the World's Fair was lost. It was so well done and so naturally done that a majority of the visitors never suspected that a landscape gardener had been employed.

After the glorious beauty of June we might be content to have our garden tame for a month or two. But there is no need for tameness. At the beginning of July the magnificent Japanese irises are in bloom, than which there is nothing finer. Wealthy men build and maintain glass houses at great expense to shelter

FORSYTHIA FORTUNEI

LUPINUS PERENNE

Splendid effects are to be obtained by naturalizing suitable hardy plants

AN EFFECTIVE TREATMENT OF A CITY LOT

FOXGLOVES IN A GARDEN AT EDGEWORTH, PA.

things not half so fine. After the irises come the Japanese lilies, and with a little management these will give a brave show of bloom throughout the summer and fall until frost comes. To carry us through the summer we have also tall phloxes, yuccas, rudbeckias, gaillardias, tiger lilies, hollyhocks—single and double—campanulas, *Rosa rugosa*, day lilies, altheas, hydrangeas, tamarix, hardy sunflowers, bocconias, boltonias, the splendid tall delphiniums, and the curious and beautiful *good* (*Liatris pycnostachya*), which attracts all the butterflies in the neighborhood. These and many other lovely things give a succession of beauty throughout the summer days.

And when fall comes we have still some of the best flowers in reserve: notably the Japanese anemones and the old-fashioned and really hardy chrysanthemums. The flowers of both these good things will endure the early frosts and early snow-storms and delight us with a show of bloom on such sunshiny days as we may be favored with in late fall.

It may be thought that to win my admiration a flower must be hardy. Nothing of the sort. Certainly the basis of all good outdoor gardening must be hardy material; but the skilful gardener or amateur will find a place for many tender plants, and especially for the so-called summer-blooming bulbs, such as gladioli, dahlias, and tuberous begonias, all of which are easily wintered in any dwelling-house; and he will even find a place for the new large-flowering cannas, but that place is not in isolated beds on the lawn. I have seen them used to the best advantage in small groups in the margin of shrubbery, where the full benefit of their really fine coloring was attained, but their stiffness and ungracefulness concealed. And the many fine annuals which are so cheaply and easily raised from seeds are not to be overlooked—*Phlox Drummondii*, Shirley poppies, sweet peas, asters, calliopsis, are all fine, and I am free to confess that there are but few things among hardy plants that I admire

more than a fine mass of tall nasturtiums. The garden of hardy plants is within the reach of the humblest gardener, yet it will satisfy the demand

of the most ambitious; and the finest show places of America and Europe are devoted almost exclusively to hardy material. If a great collection is desired, there are countless thousands of species and varieties to be obtained; or if it is desired to show great cultural skill, the rare alpines, the lovely California poppy (*Romneya Coulteri*), the stately *eremurus*, the

HARDY ASTERS

LAWN ON MR. HUNNEWELL'S GROUNDS, WELLESLEY, MASS.

charming rock roses, the noted edelweiss, the dainty trailing arbutus, and scores of other lovely but difficult plants will try one's ingenuity and patience to the utmost. In gardening, as in other pursuits, the greater the labor the greater the reward.

I have almost overlooked the water garden,* which of all gardens is perhaps the most interesting and charming. What possibilities here of lovely and artistic arrangements with all the great variety of aquatic and

POND LILIES, WITH HARDY HYDRANGEAS IN THE BACKGROUND

semi-aquatic plants! What can be more lovely than the nymphæas, now obtainable in a score of shades and colors, or grander than the stately nelumbiums, with their splendid pink, white or yellow flowers? How charming the water garden can be has been shown by Mr. Wilson, of

*Since this lecture was delivered, Miss Jekyll's charming book, "Wall and Water Gardens," has been published. It describes and illustrates two very interesting phases of gardening in an exhaustive way, and is altogether a delightful book, with some of the best gardening pictures that have ever been published.

RHODODENDRON MAXIMUM
Photographed one month after planting

1917

Wisley, England, and if there are any more interesting or lovely gardens than this I have failed to see them.

Recently there have been introduced a great many new varieties of nymphæas, all interesting to the collector; but Mr. Robinson says, and my experience confirms it, that the really desirable hardy garden kinds can be included in a selection of six varieties,—that is, varieties of such vigorous growth and free-flowering qualities that they make garden pictures. The varieties he names are *Nymphæa alba candidissima*, *N. Gladstoniana*, *N. Marliacea rosea*, *N. Marliacea chromatella*, *N. odorata*, and *N. odorata rosea*.

The most important thing we have to consider in connection with gardening hardy plants and shrubs is their arrangement. We must study to produce a pleasing effect at all seasons and to have a succession of bloom, so that the garden will never be dull or uninteresting.

First, let us take the smallest garden that we can hope to make a gardening success with,—that is, a fifty-foot city or suburban lot. This is a lot usually considered too small to do much with in a gardening way, yet it is the lot owned by thousands of well-to-do and cultivated people, and well worthy of consideration. I can best illustrate a good arrangement for such a lot by describing a garden in my neighborhood. The lot is fifty feet front and one hundred and twenty feet deep to an alley. A path leads from the sidewalk to the steps of the front porch; thence around the west side of the house to the steps of the kitchen porch, and thence straight out to the alley. The house is thirty feet from the street line. The owner of the lot believes with me that every garden should be inclosed, and has selected as the most desirable inclosure a hedge of California privet, which furnishes him a background of verdure to set his flowering plants against. He has some difficulty in establishing a portion of the hedge immediately between his house and those of his neighbors, on account of the shade, but has overcome it by extra culture and deep trenching and draining. The plan of his extremely simple but effective garden is as follows: A border has been made entirely around the house except at the entrances, varying from one to three feet in width. The front porch is covered with Hall's and golden honeysuckles, *Clematis Jackmani*, *C. Henryi*, and *C. paniculata*. The borders in front of the porch are planted with *Eulalia gracillima*, erianthus, *Funkia Sieboldiana* and *F. subcordata*—the funkias in front of the eulalia and erianthus. As all these plants are grown for

H. W. SHEPHERD

RHODODENDRON MAXIMUM
IN THE WOODS

GERMAN IRIS

BORDER OF TULIPS ALONG EDGE OF SHRUBBERY

Showing an effective and permanent way of using spring-flowering bulbs

form and foliage, they are effective throughout the season. A group of tuberous begonias is also introduced in this border, and of course has to be planted every season. The border on the east side of the house is quite shaded, and consequently is planted with shade-loving plants, principally native ferns, with groups of native cypripediums, trilliums, lilies-of-the-valley, tiarellas, and a large group of *Lilium lancifolium* at the end of the border where there is the most light. The garden back of the house is almost fifty feet square, but one side is perhaps sixty feet on account of the shape of the house. This garden is completely inclosed by a border, except where it is broken by the necessary path. This border commences west of the kitchen porch steps, and follows the line of the house until it reaches the division between the front and back gardens; it then crosses to the hedge, which it follows, so that there is a flower border in front of all the hedge back of the line of the house. This border is five feet wide except on the west side of the lot, where the entire space,

about seven feet, is taken up, except a narrow border of grass between the shrubs and the walk. This space is planted with fifty hardy roses, mostly hybrid perpetuals, in thirty of the best varieties. In front of these roses is planted a narrow border, about ten inches wide, of various narcissi; among the roses gladioli are planted every spring. The remainder of the border is planted with herbaceous plants in groups, with a selection that secures a succession of bloom. This selection includes columbines, Japanese anemones, irises, lilies, peonies, German irises, *Helianthus latiflorus*, *Coreopsis lanceolata*, gaillardias, *Rudbeckia hirta*, hardy asters, campanulas, phloxes, delphiniums, and *Heuchera sanguinea*. In front of these is a narrow border of tulips, narcissi, millas, etc., which is carpeted with *Phlox subulata*. Room is also found for some sweet peas, *Phlox Drummondii*, and nasturtiums.

(Placing a border of hardy plants in front of a hedge is one of the most effective arrangements that can be made, but for cultural results about the worst, as the roots of the hedge rob the plants of needed sustenance. This difficulty is easily overcome, however, by placing a sunk partition, say two feet deep, of two-inch oak planks between the hedge and the border.)

The kitchen porch of this house is covered with honeysuckles and clematis and the brick walls with *Ampelopsis Veitchii*. At one corner of the house is planted a Chinese wistaria, which is trained upon a single wire to the top of the house and then along the eaves. The necessary, but usually unsightly, posts for the clothes-line are converted into a charming feature of the garden in this way: For the posts, locust saplings about eight inches in diameter, with the branches shortened back to five or six feet, have been used; these are covered with Japanese honeysuckle, trumpet creeper, and *Clematis paniculata*, one over each of three posts; and golden honeysuckle and *Clematis Jackmani* together on the other. As the space for flowering shrubs is extremely limited, only the choicest are used—a *Magnolia stellata* and a red-leaved Japanese maple in the front garden, and a *Magnolia Soulangeana*, a *Magnolia conspicua*, and a Japanese snowball in the back garden. The magnolias will in time become too large for the garden, but it will not be for many years, and the owner is content, for the sake of their great beauty, to cut them out and replace them with smaller ones when he must.

In addition to all this planting, the lawn is filled with crocuses, scillas, and snowdrops,—a very pleasing way of using them.

JAPANESE IRIS

This garden is the most effective, beautiful, and interesting in the neighborhood, yet is made on a lot usually considered too small to have gardening possibilities. It cost more than most gardens of this size, but it is complete; nothing more need be bought. On the contrary, the overflow of the natural increase is brightening the gardens of neighbors and friends. This garden has also privacy, which I hold is as desirable in a garden as it is in the living-rooms of the house.

Suburban lots of one hundred and fifty feet frontage, and from that to an acre or two acres in extent, are popular sizes in this country. Such lots admit of a combination border made with hardy shrubs and plants—one of the most attractive ways in which they can be used. Such a border will vary, of course, in size, shape, and formation, with the requirements of individual places, and must be designed to suit them; but let us suppose a lot of one hundred and fifty feet frontage and two hundred feet depth, with an eastern exposure. The house is

CROCUSES NATURALIZED IN OPEN WOODS

placed midway in the lot and only far enough away from the northern boundary to permit of a screen of planting. It is common to place the house as nearly in the center of the lot as possible, but it is a mistake, for such a location reduces the size of the lawn and the gardening possibilities greatly. We would occupy the entire southern and western boundaries of the lot, and perhaps a portion of the eastern, with the border, which should vary in width from five or six feet up to twenty feet, with a curved outline on the lawn. This border should be planted principally with shrubs arranged in groups, but a few trees, such as birches, magnolias and Judas trees, should be used, and a few evergreens, such as retinosporas, and quite a number of evergreen shrubs. Where a great variety of hardy plants is desired the entire margin of this border might be filled with them, but a more effective arrangement is to plant them in bold groups,—one variety in a group,—and alternate them with groups of shrubs. Some of the stronger-growing plants, such as sunflowers, foxgloves, and single hollyhocks, might be placed in the middle or back part of the border, and the Japanese lilies—auratum, rubrum, and album—and our American species, superbum, can always be planted in, and combined to ad-

LILIUM AURATUM AND HARDY HYDRANGEAS

vantage with groups of rhododendrons and azaleas. After such a border is completely planted with shrubs and hardy plants there will be many opportunities for introducing colonies of spring-flowering bulbs—tulips, narcissi, etc.—and the advantage of using bulbs in this way is that the planting is permanent and that they are really more effective than in formal-shaped beds cut out of the lawn. It is the intention to keep this border in a cultivated condition, free from weeds and grass, and to give an annual mulching of manure. A lot of this size, planted so densely on its boundary, should have its lawn kept quite free and open and have only a few choice specimens planted on it, and no large trees, except street trees on the edge of the sidewalk.

I do not claim that this is the most artistic arrangement that can be made for a small suburban place. I have in mind a most artistic place that is almost inclosed by a quite narrow planting of ordinary trees and shrubs, with a mass of trees back of the house and a single magnificent specimen tree on the front lawn. This is a satisfactory arrangement, as an example of fine architecture is satisfactory, but all the variety, interest, and pleasure of gardening is lost.

In larger grounds, where a vegetable garden and perhaps an orchard are features, the opportunities for using hardy shrubs and plants are much greater and more varied. The vegetable garden may be made the most interesting and delightful place imaginable. Usually it is simply a field of vegetables, fully exposed from all points of the ground and very often unsightly. Now, the vegetable garden should be concealed from the lawn and house; and this necessity at once suggests a border, or boundary planting, of shrubs and herbaceous plants as described for the smaller suburban lot. This planting should not only hide the garden but should hide its outlines, which are usually rectangular. The garden itself should be inclosed with a hedge, which should show from the inside of the garden but never from the lawn. California privet makes a very satisfactory garden hedge, but where that is not hardy, hemlock spruce can be used. Nothing makes a finer hedge than this, but it is slower growing than the privet, of which I have seen a perfect hedge five feet high made in three seasons, starting with two-year-old plants. A convenient walk from the house should pass through the shrubbery into the garden, and of course a convenient entrance will be made for bringing in manure, etc. A walk should be laid out all around the garden five to six feet wide, with a six-foot border for flowers between the walk and the hedge. There should

GRASS WALK BETWEEN CALIFORNIA PRIVET HEDGE AND BORDER OF HARDY PLANTS

be also two walks, six feet wide, crossing each other at right angles and dividing the garden into four rectangular pieces of about equal size. On both sides of these walks, grapes, dwarf pears, and small fruits can be planted, and also on the inner sides of the outer walk if desired. The walks can be made of any material that is convenient, and need not be expensive. In one garden that I know, they are made of grass and kept as a lawn would be. I know that there are objections that can be urged against grass walks, but the owner of the garden in question does not find them objectionable, and they are certainly more pleasing to the eye than gravel walks. The border between the walk and the hedge should be given up entirely to flowers; hardy plants should predominate, but there should be liberal spaces reserved for summer-blooming bulbs and annuals. In the hardy plants each variety should be grouped and as many sorts used as thought desirable, but in making a selection flowers suitable for cutting, as well as for making a garden effect, should be preferred. Such bold and striking plants as single hollyhocks and foxgloves should be planted in decided masses, and a border with eastern or southern exposure should be used for hybrid perpetual roses.

A vegetable garden, arranged as described and properly cared for, in addition to being an interesting and pleasant place to visit, would furnish an abundant supply of cut-flowers for the house, for the church, for the hospital, and for friends; and I think one of the keenest pleasures a garden can afford is the ability to give away flowers without stint. The garden of hardy flowers enables one to give away plants as well as flowers, for the natural increase soon makes a surplus.

In large grounds there are often opportunities for using hardy plants and shrubs in a freer and more picturesque way than any I have suggested; that is, the planting of them in groups and masses to produce the same effects as if they were growing wild. Indeed, after the first careful planting, they should be allowed to grow wild, without culture and uncontrolled. The naturalizing of hardy material does not mean that we should attempt to imitate the thickets, woods, or meadows on our lawns. It does mean the taking advantage of a brookside for groups and colonies of irises, narcissi, hardy ferns, the splendid *Lilium superbum*, and the scores of beautiful things that will thrive in the grass if it is not to be cut with the lawn-mower. It means the planting of an irregular group of foxgloves on the edge of a wood, or the covering of a rough bank with a mass of kalmias or native azaleas

or native rhododendrons, or with all of these shrubs together. It means increasing the beauty and interest of wild and rough parts of a place a hundred-fold, but considerable taste and knowledge of materials are needed to produce good results.

We must not overlook the claims of climbing shrubs and plants

DOG'S-TOOTH VIOLETS

to our consideration. No gardening scheme, large or small, should ignore them. We can imagine a most delightful garden where they, in connection with trees and shrubbery, alone are used; and, if we consider their decorative effect, foliage, gracefulness of growth, and the great beauty of flowers that many of them have, we must admit that they are entitled to a more important place in our gardens. The free use of the clematis family alone would give a thousand-fold more beauty than is

obtainable with the most lavish use of bedding plants; and here we not only consider the large-flowered type but the smaller-flowered sorts as well, with their luxuriance of growth and their charming effect when used as tree, shrub, hedge, or fence drapery. And then the climbing roses—what a glorious possibility here, with their showers of bloom in June!

Climbers will not exhibit their best charms if trained in a stiff and formal manner; they must, in whatever position used, be allowed to grow untrammelled. My neighbor's garden furnished a good illustration of this. He planted common morning-glories all about his porch, with the intention of training them on strings later; but he was diverted from his intention and the morning-glories were allowed to grow as they would. The effect was most charming; they clambered over every shrub they could reach, shared a trellis with a clematis, and, where they could find nothing to climb on, formed mounds of green of the most tangled and pleasing description. Morning-glories, common as they are, if used rightly, produce the most delightful effects. One of the right ways is to sow them among tall grass, or among low bushes and shrubbery; and as they renew themselves annually from seed they may properly be considered hardy. As a rule, vines should not be trained in a formal manner. If you would have them exhibit their best graces they must be allowed to grow uncontrolled. All know the uses that vines are commonly put to—that of covering the walls of the house, furnishing shade for porch or arbor, and the covering of screens and trellises. Besides these, almost every place of any size offers opportunities for their growth in a freer and more natural way that will greatly add to the charm and delight of the garden. Perhaps a neglected shrubbery, unsightly in itself, will afford support for such easily grown things as honeysuckles, *Clematis Virginiana* and *C. Flammula*; or the common wild morning-glory, so plentiful in many places, would be quite at home here. An unsightly fence might be partly concealed and made a thing of beauty with climbing roses, honeysuckles, or clematises; or an old tree, past its prime and beginning to be unsightly, would be the very thing on which to grow such vigorous vines as the aristolochia, wistaria, trumpet vine, and the common Virginia creeper. In how many places are seen evergreens in a half-dead condition, which only procrastination has spared from the axe, and as unsightly as could well be; but nothing could be better on which to grow the large-flowered clematis, which furnishes a profusion of lovely bloom that no words can describe. Some vines, like the golden honeysuckle, planted in the grass,

IRIS SIBIRICA

will pile themselves up in masses, and if any shrub is within reach will clamber over it, producing an effect entirely pleasing. There is nothing more charming in nature than the combination of shrub or tree with wild vines. Who has not seen the living canopy of green formed by the wild grape over the top of some tree or the stronger-growing shrubs, or how some wild vine converts a thicket of brambles and an old fence into objects of beauty that the most ambitious gardener might copy?

It is not possible to name all of the desirable hardy shrubs and plants now obtainable; but I think it is well to give a list of what I would commend as the very best, taking into consideration their ease of culture, as well as the beauty of their bloom, form, and foliage. I know many would disagree with me as to the contents of this list, but I am confident that the beginner could make no mistake in including any or all of the varieties named in this planting list. I have tried to name these plants and shrubs somewhat in the order they hold in my esteem; but this is a difficult matter, as I am very apt to think the finest thing to be the last fine thing that I have seen.

LIST OF PLANTS

Hybrid perpetual roses in variety, including	Delphiniums in variety,	<i>Funkia variegata</i> ,
Mrs. John Laing,	German irises,	<i>Arundo Donax</i> ,
Paul Neyron,	<i>Aster Novæ-Angliæ roseus</i> ,	<i>Hibiscus Moscheutos</i> ,
Ulrich Brunner,	Chrysanthemums — old-fashioned hardy sorts,	<i>Heuchera sanguinea</i> ,
Mme. Gabriel Luizet,	<i>Iberis sempervirens</i> ,	<i>Pyrethrum roseum</i> —single and double varieties,
General Jacqueminot,	<i>Lilium superbum</i> ,	<i>Spiræa palmata</i> ,
Anne de Diesbach,	<i>Lilium Canadense</i> ,	<i>Spiræa Filipendula</i> ,
Magna Charta,	<i>Lilium Hansonii</i> ,	<i>Spiræa Aruncus</i> ,
Baroness Rothschild,	<i>Lilium Brownii</i> ,	<i>Spiræa lobata</i> ,
Captain Christy, and	<i>Lilium excelsum</i> ,	<i>Tiarella cordifolia</i> ,
Clio,	<i>Lilium Thunbergianum</i> in variety,	<i>Myosotis palustris semperflorens</i> ,
<i>Anemone Japonica alba</i> ,	<i>Lilium tigrinum</i> ,	<i>Helianthus rigidus</i> ,
<i>Anemone Pennsylvanica</i> ,	<i>Lilium tigrinum fl. pl.</i> ,	<i>Campanula trachelium</i> ,
Single hollyhocks,	<i>Lilium Kramerii</i> ,	<i>Platycodon Mariesii</i> ,
Japanese irises,	<i>Phlox subulata</i> and the variety	<i>Viola cornuta</i> ,
<i>Lilium auratum</i> ,	<i>alba</i> ,	<i>Cypripedium spectabile</i> ,
<i>Rudbeckia speciosa</i> ,	<i>Phlox divaricata</i> ,	Native ferns in variety,
Rudbeckia, Golden Glow,	<i>Phlox Carolina</i> ,	<i>Thalictrum aquilegifolium</i> ,
Aquilegias in variety,	<i>Phlox reptans</i> ,	<i>Liatris pycnostachya</i> ,
<i>Yucca filamentosa</i> ,	<i>Pyrethrum uliginosum</i> ,	<i>Tritoma Pfitzerii</i> ,
<i>Pæonia festiva maxima</i> ,	<i>Sedum spectabile</i> ,	<i>Tritoma</i> in variety,
Herbaceous peonies — single and double, in variety,	<i>Doronicum plantagineum excelsum</i> ,	Polyanthus,
<i>Lilium speciosum</i> ,	Gaillardias,	English primrose,
<i>Helianthus orgyalis</i> ,	Oriental poppies,	<i>Asclepias tuberosa</i> ,
<i>Helianthus mollis grandiflorus</i> ,	Tree peonies,	<i>Hemerocallis flava</i> ,
<i>Helianthus Maximiliani</i> ,	<i>Eulalia Japonica gracillima</i> ,	<i>Hemerocallis Thunbergii</i> ,
<i>Helianthus lætiflorus</i> ,	<i>Funkia Sieboldiana</i> ,	<i>Hemerocallis aurantiaca major</i> ,
Foxgloves,	<i>Funkia subcordata</i> ,	<i>Hemerocallis fulva</i> ,
Phlox, Miss Lingard,	<i>Funkia cucullata</i> ,	<i>Bocconia</i> in variety,
Tall perennial phloxes in variety,	<i>Funkia cærulea</i> ,	<i>Monarda didyma</i> ,
		<i>Pentstemon Torreyi</i> ,
		<i>Lythrum roseum</i> .

SPRING-FLOWERING BULBS

Narcissus, <i>Bicolor Horsfieldii</i> ,	<i>Narcissus incomparabilis alba</i>	Tulips, May-blooming,
Narcissus, Poet's,	<i>Stella</i> ,	Tulips, Parrot,
Narcissus, Emperor,	Narcissus, <i>Barri conspicuus</i> ,	Tulips in variety,
Narcissus, Van Sion,	Narcissus, Sir Watkin,	<i>Milla uniflora</i> ,
<i>Narcissus alba plena odorata</i> ,	Tulips, Early-flowering single,	Crocuses in variety,
Narcissus, Golden Spur,	Tulips, Gesneriana — late-flowering single,	<i>Scilla Sibirica</i> ,
Narcissus, Trumpet Major,	Tulips, Late-flowering,	Scillas in variety,
Narcissus, <i>Bicolor Empress</i> ,	Tulips, Show,	Single snowdrops.

CLIMBERS

<i>Clematis paniculata</i> ,	Trumpet creeper,	<i>Bignonia grandiflora</i> ,
<i>Clematis Henryi</i> ,	Golden Japan honeysuckle,	<i>Celastrus scandens</i> ,
<i>Clematis Vitalba</i> ,	Crimson Rambler rose,	<i>Celastrus paniculatus</i> ,
<i>Clematis coccinea</i> ,	Rambler Rose, Helene,	<i>Euonymus radicans</i> ,
<i>Clematis hybrids</i> ,	Rose, W. C. Egan.	<i>Euonymus radicans variegatus</i> ,
<i>Ampelopsis Veitchi</i> ,	<i>Rosa Wichuraiana</i> ,	<i>Polygonum Baldschuanicum</i> ,
<i>Lonicera Halliana</i> ,	<i>Rosa Wichuraiana rubra</i> ,	<i>Vitis odorata</i> ,
<i>Clematis Jackmani</i> ,	<i>Aristolochia Siphon</i> ,	<i>Lonicera Heckrotti</i> ,
Purple Chinese wistaria,	<i>Rosa multiflora</i> ,	<i>Lonicera fuchsoides</i> ,
<i>Clematis Virginiana</i> ,	<i>Akebia quinata</i> ,	<i>Actinidia arguta</i> .
<i>Clematis Flammula</i> ,	<i>Bignonia radicans</i> ,	<i>Berchemia racemosa</i> .

SHRUBS

<i>Kalmia latifolia</i> ,	<i>Spiræa Thunbergii</i> ,	<i>Deutzia Lemoinei</i> ,
Rhododendrons, Catawbiense	<i>Spiræa prunifolia fl. pl.</i> ,	<i>Hydrangea quercifolia</i> ,
hybrids,	<i>Spiræa sorbifolia</i> ,	<i>Philadelphus coronarius</i> ,
<i>Rhododendron maximum</i> ,	<i>Rhus aromatica</i> ,	<i>Philadelphus Avalanche</i> ,
<i>Rhododendron Catawbiense</i> ,	<i>Clethra alnifolia</i> ,	<i>Philadelphus erectus</i> ,
<i>Magnolia stellata</i> ,	<i>Cercis Japonicum</i> ,	<i>Weigela rosea</i> ,
Ghent and Mollis azaleas,	<i>Sambucus Canadensis</i> ,	<i>Weigela rosea nana variegata</i> ,
Japan maples in four varieties	<i>Sambucus pubens</i> ,	<i>Weigela</i> , Eva Rathke,
— <i>sanguineum</i> , <i>aureum</i> , <i>dis-</i>	<i>Halesia tetraptera</i> ,	<i>Weigela</i> , Conquete,
<i>sectum</i> , and <i>dissectum atro-</i>	<i>Viburnum dilatatum</i> ,	<i>Weigela</i> , Saturne,
<i>purpureum</i> ,	<i>Viburnum oxycoccum</i> ,	<i>Weigela</i> , Lavellei,
<i>Hydrangea paniculata grandiflora</i> ,	<i>Viburnum dentatum</i> ,	<i>Weigela</i> , Abel Carriere,
<i>Hydrangea paniculata</i> ,	<i>Azalea calendulacea</i> ,	<i>Weigela candida</i> ,
<i>Hydrangea radiata</i> ,	<i>Azalea arborescens</i> ,	<i>Forsythia Fortunei</i> ,
Japan snowball,	<i>Azalea nudiflora</i> ,	Golden Elder,
Lilacs in variety,	<i>Azalea Vaseyi</i> ,	<i>Andromeda Japonica</i> ,
<i>Tamarix tetrandra</i> ,	<i>Spiræa Van Houttei</i> ,	<i>Andromeda floribunda</i> ,
<i>Tamarix Chinensis</i> ,	<i>Spiræa arguta</i> ,	<i>Andromeda arborea</i> ,
<i>Berberis Thunbergii</i> ,	<i>Rosa rugosa</i> ,	<i>Elæagnus longipes</i> ,
<i>Forsythia suspensa</i> ,	<i>Rosa setigera</i> ,	Snowberries, white and red,
<i>Exochorda grandiflora</i> ,	<i>Rosa rubrifolia</i> ,	<i>Prunus maritima</i> ,
<i>Desmodium penduliflorum</i> ,	<i>Rosa Carolina</i> ,	<i>Prunus Pissardi</i> ,
<i>Spiræa Lindleyana</i> ,	<i>Rosa arvensis</i> ,	<i>Hypericum aureum</i> ,
<i>Spiræa Reevesiana</i> ,	Altheas, dwarf single white,	<i>Ligustrum Iboia</i> ,
<i>Spiræa Reevesiana fl. pl.</i> ,	Buist's variegated, and	Upright honeysuckles,
Spirea, Anthony Waterer,	double varieties,	<i>Xanthoceras sorbifolia</i> ,
<i>Spiræa Bumalda</i> ,	Japan quince,	<i>Mahonia aquifolium</i> ,
	<i>Deutzia crenata fl. pl.</i> ,	<i>Leucothoe Catesbaei</i> .
	<i>Deutzia gracilis</i> ,	

H. W. SHEPHERD

I have placed hardy roses at the head of the list of plants, although they are really shrubs, but they belong in the flower garden and not in the shrubbery. None will dispute their right to the place of honor; but, notwithstanding the universal admiration that is expressed for them, they are grown in but comparatively few gardens. It requires considerable effort to have them in perfection, but the results amply reward the labor. I cannot go into cultural directions; but I wish to say, and with considerable emphasis, that in my experience in growing roses, which has been as an amateur, I have found roses on their own roots much more satisfactory than budded plants.

I know that Japanese irises and a dozen other herbaceous plants

have as strong claims perhaps for consideration as the white Japanese anemone, which has my unqualified admiration. It has so many good qualities—individual beauty of flowers; great effectiveness in the garden, shrubbery, or border; good foliage at all seasons; a long season of bloom, and flowers that will endure a degree of frost that destroys almost everything else. Its only limitation is that it will not thrive in light, sandy soil, but in a heavy, rich soil it grows with great vigor. I have often seen it five feet high, and that, too, in places where it had been naturalized and received no attention after planting.

Why is it that single hollyhocks are not offered for sale or grown by nurserymen and plantsmen? Surely they are the most stately, picturesque, and decorative herbaceous plants in cultivation, and I have never met anybody who did not greatly admire them; but, so far as

PAULOWNIA IMPERIALIS

Showing effect of growth when cut to the ground every spring

MR. EGAN'S LAWN AT HIGHLAND PARK, ILL.

PYRETHRUM ROSEUM

I know, they cannot be bought—not even the seed. The single sorts are always very much finer than the highly cultivated double sorts, whose culture has been made difficult of late on account of the hollyhock disease. On the contrary, the single varieties are of the easiest culture, and once established will take care of themselves in almost any location.

Equally neglected are the old-fashioned and really hardy chrysanthemums, which are still to be found in an occasional garden. I know these chrysanthemums would cut but a poor figure at exhibitions and in florists' windows, but they have far more gardening value than all the hundreds of new varieties introduced in the last few years, which can only be grown in perfection by the skilful florist or by the amateur who has all the facilities of the florist.

The numerous fine exhibitions of chrysanthemums every fall are very enjoyable, but I fail to see that they have helped gardening any, except that of a very limited class. On the contrary, outdoor gardening has been retarded by the disappointment of thousands of people who have tried to grow the exhibition pets in their gardens.

STEEP BANK IN FRONT OF CITY HOUSE, COVERED WITH SHRUBS

Certainly more beautiful than the sod terraces so commonly seen

In a recent number of "Garden and Forest," Mr. Gerard has very properly called attention to the possible field of the hybridizer in improving really hardy chrysanthemums for garden purposes; and in a later number a writer takes exceptions to his remarks, claiming that the flowers are always damaged by frost and that their habit is straggling and poor as compared with the improved greenhouse varieties.

Now, I think we have all seen chrysanthemums in farmhouse yards and village gardens that have endured for years, and that have, without any special culture, produced an annual mass of very satisfactory flowers and foliage; and there is no doubt that the flowers of these sorts will go through considerable frost and snow without tarnishing.

These chrysanthemums are certainly useful material for the hybridizer, but for the present we shall be very well satisfied if some enterprising nurserymen will collect from old gardens such varieties as now exist and give us the opportunity of using them in our gardens.

Before I conclude I wish to give a special word of praise to my

BED OF SWEET WILLIAMS

A GOOD GROUPING OF EVERGREENS

favorite shrub, *Kalmia latifolia*, which is known in Pennsylvania, where it is very common in the woods, as the small-leaved mountain laurel. It is greatly admired as a wild flower, and an occasional unsuccessful attempt is made to transplant it from the woods; but nurserymen have made no attempt to introduce it into general culture, and it is somewhat curious that it is necessary to send to England to get fine specimens of this distinctively American plant. Excepting odor, it has every good quality that a shrub can have—evergreen foliage and good habit, great quantity of durable bloom, extreme daintiness and beauty of individual flowers, and usefulness as cut-flowers. If the flowers are cut just as the buds are about to open, and placed in water, they will last for two weeks in the house, and if arranged with taste nothing is more decorative.

In one of his books, Donald G. Mitchell suggests that the kalmia would probably make an excellent hedge. I have never seen it tried, but I am confident that it would—perhaps as fine as the holly hedges in England,

HEMLOCK HEDGE

BLACK SPRUCE IN THE ARNOLD ARBORETUM, BOSTON

and, with a little discretion in trimming, a hedge of it could be made to produce a fine crop of bloom at least every other season.

With nursery-grown plants to start with, the kalmia is of the easiest culture, requiring no special soil or location, and it is perfectly hardy. Like all evergreen shrubs, it should be transplanted in the spring.

All the hardy plants I have named, with two or three exceptions, will thrive with ordinary garden culture, and some of them without any attention after planting; but, as they are usually planted where they are to remain for years, it would be well to make the initial preparation of the soil for them a liberal one. I usually specify that borders for hardy plants should have two feet of good, friable soil, mixed with one-fourth its bulk

of rotted stable manure, and that they should be prepared in late summer or fall, the planting to be done in the fall and the following spring. Fall planting is not recommended for everything; my experience is that many plants are winter-killed after fall planting that would be quite hardy if they had the benefit of a growing season to establish themselves. Of course special plants require special treatment; for instance, the bulbs of

HOME OF AN ENGLISH COTTAGER

Showing the beauty of simple but tasteful planting. Compare this with illustration of stone house on opposite page

the *Lilium auratum* should not come in direct contact with manure, and the fine double and single varieties of *Pyrethrum roseum* should be planted in beds raised a few inches, to prevent their rotting out in cold, wet weather.

I would advise the same liberal preparation of the soil for shrubs that I do for hardy plants, though in many instances the expense would be prohibitory, or thought so; but in any event I should insist on the ground being subsoiled or trenched and a liberal application of manure being made. An annual mulching of manure is beneficial to shrubs and hardy plants.

I have had a somewhat extended experience with rhododendrons, and my opinion of the proper soil to grow them in may be worth something. Their beauty is now pretty generally known and appreciated, but they are popularly considered tender and difficult to grow. This is largely owing to the selling of improperly grown plants and tender varieties, and to late fall planting, which is very apt to be fatal. I have found that when

HOUSE AND GROUNDS OF AN AMERICAN MILLIONAIRE

Photograph taken twelve years after completion of house

Catawbiense seedlings, or the well-known hardy named varieties, grown on their own roots from layers, were planted, there was no difficulty in growing them in any ordinary soil or in any position, except immediately under old-established trees. I have seen them grown with peat and with leaf-mold, but the best results I have ever seen in this country were where an excavation two and one-half feet deep had been made for them and filled in entirely with turfy, fibrous sods, chopped up, and allowed to stand over winter before planting. No manure was mixed with the sods, but after the

rhododendrons were planted a mulching of rotted cow manure was applied to the surface of the soil.

It seems to me I have said a great deal about the merit of hardy plants and shrubs, and but very little about their culture; but it must be remembered that my mind is more occupied with the designing of gardens than with their care, and I think it is quite as important to create an interest in hardy material as it is to teach how to grow it. Cultural skill will soon follow enthusiastic desire, which your society is doing so much to create, and when we can have horticultural societies of like intelligence and breadth of object in all our large cities the advancement of the best gardening will be rapid.

NOTE.—The plans illustrated in the following pages are intended to show some correct principles of arrangement and not to be used for any particular place. A plan, to be worth anything, must be made for the grounds for which it is intended, and all surroundings and conditions must be considered.

SYRINGA VILLOSA. A SPECIES OF LILAC

DETAILED PLAN FOR FLOWER GARDEN

The accompanying plan is a section of the planting plan made for the grounds (five acres in extent) of the late C. L. Magee, Esq., of Pittsburg. The scheme of this garden is sufficiently explained by the specifications. The variety of plants and shrubs used insures a succession of bloom from early spring until November. All the walks in this garden are of green sward, which makes it far more attractive than if they had been made of gravel, cement, or of any of the materials usually employed.

There are a few old trees in the garden, and the planting near them is suitable for a shady location, and vines have been planted to climb over some of them (old cherry trees).

The beds used for spring-flowering bulbs are also used for annuals, such as petunias, poppies, *Pblox Drummondii*, pinks, nasturtiums, and mignonette in the summer.

A portion of the planting of tall shrubs and small trees is designed to shut out of view outbuildings on the adjoining property.

PLANTING SPECIFICATIONS

1. <i>Magnolia Soulangeana</i> .	27. <i>Rhus glabra laciniata</i> .
2. <i>Spiræa ariaefolia</i> .	28. <i>Magnolia purpurea</i> .
3. <i>Clethra alnifolia</i> .	29. <i>Weigela floribunda</i> .
4. Rhododendrons, with <i>Lilium auratum</i>
planted among them.	30. <i>Hydrangea paniculata grandiflora</i> .
5. <i>Deutzia gracilis</i> .	31. <i>Forsythia Fortunei</i> .
6. Snowberries.	32. <i>Polygonum cuspidatum</i> .
7. Rhododendrons, with <i>Lilium auratum</i>
planted among them.	33. <i>Vitex Agnus-castus</i> .
8. <i>Ligustrum Ibo</i> ta.	34. <i>Cornus florida</i> .
9. <i>Cornus sanguinea</i> .	35. <i>Cratægus Oxyacantha</i> .
10. <i>Hydrangea paniculata grandiflora</i> .	36. <i>Hydrangea quercifolia</i> .
11. <i>Colutea arborescens</i> .	37. <i>Weigela candida</i> .
12. <i>Spiræa Van Houttei</i> .	38. <i>Clethra alnifolia</i> .
13. <i>Cercis occidentalis</i> .	39. <i>Corchorus Japonicus</i> .
14. <i>Viburnum plicatum</i> .	40. <i>Azalea calendulacea</i> , with <i>Lilium superbum</i>
planted among them.
15. <i>Rhodotypos kerrioides</i> .	41. <i>Lonicera fragrantissima</i> .
16. <i>Magnolia Soulangeana</i> .	42. <i>Spirea</i> , Anthony Waterer.
17. <i>Itea Virginica</i> .	43. <i>Viburnum acerifolium</i> .
18. <i>Rosa moschata</i> .	44. <i>Viburnum Oxycoccus</i> .
19. <i>Aralia Japonica</i> .	45. <i>Viburnum dentatum</i> .
20. <i>Viburnum Lantana</i> .	46. <i>Viburnum dilatatum</i> .
21. White birch.	47. <i>Viburnum Oxycoccus</i> .
22. Single white altheas.	48. <i>Viburnum Nepalense</i> .
23. Penzance sweetbriars.	49. <i>Viburnum nanum</i> .
24. <i>Philadelphus cordifolius</i> .	50. <i>Spiræa Lindleyana</i> .
25. <i>Eulalia Japonica gracillima</i> .	51. <i>Euonymus radicans variegatus</i> .
26. <i>Cydonia Japonica</i> .	52. <i>Cephalanthus occidentalis</i> .
	53. <i>Hydrangea radiata</i> .

DETAILED PLAN FOR FLOWER GARDEN, *continued*

54. *Rubus odorata*.
55. Foxgloves.
56. Snowberries, red and white.
57. *Euonymus atropurpureus*.
58. *Itea Virginica*.
59. *Corchorus Japonica variegata*.
60. *Aster Novæ-Angliæ*.
61. *Weigela rosea*.
62. *Berberis Thunbergii*.
63. *Clematis paniculata*.
64. *Spiræa tomentosa*.
65. *Erianthus Ravennæ*.
66. *Azalea Mollis*, with *Lilium lancifolium* planted among them.
67. *Sambucus pubens*.
68. *Hypericum Moserianum*.
69. Ghent azaleas, with *Lilium canadense*, *Martagon*, *Brownii*, *superbum* and *longiflorum* planted among them.
70. *Mabonia aquifolium*.
71. *Spiræa Thunbergii*.
72. *Rosa rugosa alba*.
73. *Rosa pomifera*.
74. *Euonymus atropurpureus*.
75. *Ceanothus Americanus*.
76. *Rosa rubrifolia*.
77. *Spiræa salicifolia*.
78. *Berberis Thunbergii*.
79. Assorted flowering almonds.
80. *Rosa rugosa rubra*.
81. Hybrid perpetual roses.
82. Aquilegias, single long-spurred.
83. Hardy pinks.
84. Japanese iris.
85. Single early tulips and annual pinks.
86. Narcissus, Sir Watkin.
87. Narcissus, Orange Phœnix.
88. Narcissus, Ard Righ.
89. Narcissus, *Bicolor Horsfieldii*.
90. *Narcissus odoratus*,
91. Sweet peas.
92. *Lobelia cardinalis*.
93. *Platycodon Mariesi*.
94. Tiger lilies.
95. *Dictamnus fraxinella*.
96. Tall phlox.
97. *Myosotis palustris semperflorens*
98. *Spiræa palmata*.
99. Japanese iris.
100. German iris.
101. Tall phlox.
102. *Spiræa Filipendula*.
103. *Sedum spectabile*.
104. *Tritoma grandiflora*.
105. *Funkia alba*, and *Clematis paniculata* to climb tree.
106. Tall English delphiniums.
107. Narcissus, single jonquils.
108. Narcissus, *Bicolor Empress*.
109. Narcissus, CampERNELLES.
110. Narcissus, Emperor.
111. Narcissus, Golden Spur.
112. Single early tulips and *Phlox Drummondii*.
113. Florists' pinks, assorted.
114. *Boltonia latisquama*.
115. *Oenothera biennis*.
116. *Iberis sempervirens*.
117. Single hollyhocks.
118. Single hollyhocks.
119. *Pentstemon Torreyi*.
120. *Anemone Japonica alba*.
121. *Phlox subulata*.
122. *Anemone Japonica rubra*,
123. *Desmodium penduliflorum*.
124. Rudbeckia, Golden Glow.
125. *Rudbeckia speciosa*.
126. *Cypripedium spectabile*.
127. *Viola cornuta*.
128. Lily-of-the-valley.
129. *Campanula Carpatica*.
130. *Montbretia crocosmæflora*.
131. *Chrysanthemum latifolium*.
132. *Liatris pycnostachya*.
133. *Viola pedata*.
134. *Delphinium formosum*.
135. Gesneriana tulips and gladioli.
136. Parrot tulips and calliopsis.

DETAILED PLAN FOR FLOWER GARDEN

DETAILED PLAN FOR FLOWER GARDEN, *continued*

137. Sweet peas.	157. Double peonies.
138. Late tulips and Shirley poppies.	158. <i>Helianthus lætiflorus</i> .
139. <i>Narcissus biflorus</i> .	159. <i>Helianthus orgyalis</i> .
140. Narcissus, Silver Phœnix.	160. <i>Funkia Sieboldiana</i> .
141. Narcissus, Van Sion.	161. <i>Onoclea sensibilis</i> .
142. Narcissus Campernelles.	162. <i>Struthiopteris Germanica</i> .
143. Single jonquils.	163. <i>Coreopsis lanceolata</i> .
144. <i>Gaillardia grandiflora</i> .	164. <i>Phlox subulata alba</i> .
145. Tall phlox.	165. <i>Rhododendron Everestianum</i> .
146. <i>Heliopsis Pitcheriana</i> .	166. Japanese maples.
147. Single peonies.	167. <i>Rosa setigera</i> , to climb old cherry tree.
148. <i>Heuchera sanguinea</i> .	168. <i>Lonicera Morrowi</i> .
149. <i>Tritoma grandiflora</i> .	169. Japan weeping cherry.
150. <i>Spiræa Aruncus</i> .	170. Chinese rhubarb.
151. Aquilegias, assorted single.	171. Iron wire arch, with <i>Rosa Wichuariana</i>
trained on it.
152. <i>Pulmonaria maculata</i> .	172. Iron wire arch, with Crimson Rambler
rose trained on it.
153. <i>Hemerocallis flava</i> .	A, A, A, A, A. Large old trees—cherry,
elm, etc.
154. Tall phlox.	
155. <i>Heliopsis Pitcheriana</i> .	
156. <i>Helianthus rigidus</i> .	

PLAN FOR A CITY GARDEN

This plan, made for Mr. J. R. Mellon, of Pittsburg, shows a very elaborate and comprehensive garden, and one that proved very successful. The garden is entirely inclosed with stone walls and shrubbery. The garden-house is a reproduction of an Irish thatched cottage, and the garden in the rear of it is a miniature vegetable garden.

EXPLANATION OF PLAN

1, 1, 1, 1. Deciduous shrubs.	14. Inclosed space for soil manure and
rubbish.
2, 2, 2, 2. Herbaceous perennials.	15, 16, 17, 18, 19, 20. Specimen shrubs and
small trees.
3. Rhododendrons and lilies.	21, 22, 23, 24, 25. Specimen trees.
4. Ghent and Mollis azaleas, and lilies.	In addition to planting shown on plan,
climbing roses and other vines are freely
used to cover walls, buildings, and arches
over paths, and thousands of spring-flower-
ing bulbs are planted among the hardy
plants and in the margins of the shrubbery.
5, 5. Single and double peonies.	
6, 7, 8. Specimen shrubs.	
9. Hybrid perpetual roses, and daffodils.	
10. Specimen plants.	
11. Tree peonies.	
12. Pond for water lilies and nelumbiums.	
13. Rockery, waterfall, and brook.	

PLAN FOR A CITY GARDEN

PLANTING PLAN FOR FIFTY-FOOT LOT

1. *Kalmia latifolia* or rhododendrons.
- 2, 2, 2. Ghent azaleas.
3. Rhododendron or Japanese maple.
4. *Yucca filamentosa*. Spaces between the yuccas to be covered with *Cerastium tomentosum*.
5. Nasturtiums and Bybloem tulips.
6. Single hollyhocks.
7. Lilies-of-the-valley.
8. *Spiraea venusta*.
9. *Woodsia obtusa*.
10. *Anemone Robinsoniana*.
11. *Asplenium Felix-fæmina*.
12. *Trillium grandiflorum*.
13. *Adiantum pedatum* and *Cypripedium spectabile*.
14. *Tiarella cordifolia*.
15. *Anemone Japonica alba*.
16. Sweet peas.
17. *Hydrangea paniculata grandiflora*.
18. *Rosa rugosa alba*.
19. Tiger lilies.
20. *Forsythia viridissima*.
21. *Aralia Japonica*.
22. *Sedum spectabile*.
23. *Heuchera sanguinea*.
24. *Iris Sibirica*.
25. Narcissus Emperor, followed by golden moneywort.
26. *Linum flavum*.
27. *Viola cornuta*.
28. Phlox, Miss Lingard.
29. Tall delphiniums.
30. Oriental poppies.
31. Foxgloves.
32. *Gaillardia grandiflora*.
33. Japanese iris.
34. Tiger lilies.
35. *Spiraea Van Houttei*.
36. *Deutzia gracilis*.
37. *Gentiana acaulis*.
38. *Funkia variegata*.
39. *Andromeda Japonica*.
40. *Lilium roseum*.
41. *Wahlenbergia grandiflora*.
42. *Coreopsis lanceolata*.
43. Narcissus, *Bicolor Horsfieldii*, followed by *Iberis sempervirens*.
44. *Spiraea astilboides*.
45. *Platycodon Mariesi*.
46. *Dicentra spectabilis*.
47. *Cornus Spathi*.
48. *Lilium elegans*.
49. Hybrid perpetual roses.

50. *Narcissus Van Sion*, followed by *Phlox subulata*.
51. *Lilium superbum*.
52. Iceland poppies.
53. Mixed aquilegias.
54. Herbaceous peonies.
55. *Plumbago Larpentæ*.
56. *Berberis Thunbergii*.
57. *Spiræa Bumalda*.
58. Silver maples on outer edge of sidewalk.
59. *Phlox subulata* and *Gesneriana* tulips.
60. Mixed tulips.
61. *Exochorda grandiflora*.
62. *Magnolia Soulangeana*.

A GOOD PLAN

The accompanying plan made for Mr. Samuel W. Black, of Edgeworth, Pa., shows an unusual arrangement, but one that has proven quite satisfactory and effective. There are two houses on the grounds, one occupied by Mr. Black, the other by his sister, and while each house has a separate lawn the garden between the houses is used in common. This garden is so screened by hedges and shrubbery that eventually it cannot be seen from the street. The entrance road to Mr. Black's house is between two hemlock hedges, with strip of grass on either side.

EXPLANATION OF PLAN

- 1, 1, 1. Shrubbery.
- 2, 3. Rhododendron and lilies.
4. Bank covered with *Rosa Wichuraiana* and *R. Wichuraiana* hybrids.
- 5, 6, 7, 8, 9, 10, 11, 12, 13. Specimen trees and shrubs.
14. Groups of upright honeysuckles.
15. Tulip tree.
16. *Magnolia Soulangeana*.
17. Japanese maples.
18. *Euonymus radicans*, to cover walls of house and terrace.
19. Group of *Berberis Thunbergii*.
- 20, 21, 22, 23, 24, 25, 26. Specimen trees and shrubs.
27. *Aralia Japonica*.
28. Specimen rhododendrons.
- 29, 30, 31, 32. Specimen trees.
33. Hemlock hedge, with border of hardy perennials in front.
34. *Spiræa Van Houttei*.

PLAN FOR A FIVE-ACRE PLACE

This plan is for a rectangular piece of ground of about five acres, with one street frontage. The conventional location of the house is as near the center of the grounds as it is possible to get it, but the present plan contemplates placing the house in the southwest corner of the grounds, about eighty feet from the street. The advantages of this location are the extremely convenient arrangement of the grounds it admits of, and far greater extent of unbroken lawn than if the house were placed anywhere near the center of the plat. The one objection that might be urged against this unusual location of the house is its nearness to the street; but this is overcome by the massed planting on the south line, which makes the nearest point on the street from which the house is visible over two hundred and fifty feet away.

The treatment of the vegetable garden is quite important; usually, even in quite ambitious places, it is left fully exposed to the house and grounds. While a growing crop of vegetables is not unsightly, it can hardly be claimed that it is a desirable landscape feature; and the seasons and the necessary work of the garden keep it in a condition, for a large part of the year, that had better be kept out of sight. This design encloses the garden with a hemlock hedge, which I think is the most beautiful and satisfactory one that can be grown in this climate. California privet makes a very fine hedge and can be grown to a height of five or six feet in three seasons, and is almost evergreen. Unfortunately, this privet is not quite hardy in all localities. The design of the garden provides for vegetables, fruit (such as dwarf pears, grapes, and dwarf apples) and hardy and annual flowers for cutting from early spring until November. In addition to the planting shown on the plan, a row of trees is to be planted along the west line of the place, and the porches are to be covered with vines.

As I have said before, these plans can only serve to show some correct principles of arrangement and planting. The plan for any given place must be specially made for it, and all local conditions and limitations considered.

EXPLANATION OF PLAN

1. 1, 1. Massed planting of deciduous trees, evergreens and shrubs, with groups of strong-growing herbaceous plants in the margins.	11. <i>Magnolia Soulangeana</i> .
2. Group of trees.	12. Colorado blue spruce and weeping hemlock.
3. Border for single hollyhocks.	13. Nordmann's fir, oriental spruce, and <i>Abies pendula</i> .
4. Border of hybrid perpetual roses.	14. Tulip tree.
5. 8. Border of hardy plants, lilies, and spring-flowering bulbs.	15. Pin oak.
6. Border of summer-flowering bulbs.	16. Specimen rhododendrons.
7. Border of annuals.	17. Weeping beech.
9. Japanese maples.	18. Rose-flowered Japanese weeping cherry (high grafted).
10. <i>Magnolia stellata</i> and golden yew.	19. <i>Abies concolor</i> and <i>Picea excelsa</i> .
	20. <i>Magnolia conspicua</i> .

PLAN FOR A FIVE-ACRE PLACE

PLAN FOR A FIVE-ACRE PLACE, *continued*

21. Fruit along inside paths of vegetable garden—grapes, dwarf pears, dwarf apples, etc.
22. Saplings eight inches in diameter with branches cut back to five or six feet. These posts can be covered with wistaria and similar vines.
23. Summer house or pavilion. | 24. Shrubbery.
25. Chinese cypress.
26. Rhododendrons.
27. Purple beech.
Vegetable garden to be inclosed with a hemlock hedge, which is also to be planted along the west side leading from the street to house and stable. |
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A SUBURBAN LOT

The accompanying plan, made for Mr. J. E. Porter, of Sewickley, Pa., shows an unconventional treatment of a corner lot that few people would have the courage to carry out. Yet it has many attractions and advantages for the owners and their friends. The objection is likely to be urged that the public cannot see the garden from the street; but neither is the interior of the house to be seen from the highway, and privacy in the garden is certainly as desirable as it is in the library or dining-room, and all the public that the owner is interested in will be invited to enjoy his garden as well as the hospitality of his house. The plea that it is selfish to exclude the public from one's grounds is not reasonable. I never knew of anybody being kept out of a garden who cared enough about it to ask to see it, and the charm and beauty of a garden is greatly enhanced by shutting out of view the dirt and ugliness of the street.

EXPLANATION OF PLAN

1. Masses of shrubs, evergreen and deciduous small trees, with a few groups of bold herbaceous plants.
2. Crab apple.
3. Hardy perennials.
4. <i>Magnolia conspicua</i> .
5. Japanese maples.
6. Rhododendrons, with <i>Lilium auratum</i> planted among them.
7. Japanese snowball.
8. <i>Paulownia imperialis</i> , to be cut to the ground every spring.
9. Pin oak.
10. <i>Pyrus Toringo</i> .
11. <i>Rhododendron Everestianum</i> .
12. <i>Lonicera bella</i> .
13. Group of <i>Aralia Japonica</i> .
14. Old spreading Seckle pear.
15, 16. Tulip tree. | 17. White birch.
18. Low-spreading old Apple tree.
19. White birch.
20. Scarlet oak.
21, 22, 23, 24. Cedar or locust saplings, to be covered with vines, for clothes-line posts.
25. Arched entrance, to be covered with <i>Rosa Wichuraiana</i> .
26. Border of hybrid perpetual roses.
27. Scarlet maple.
28. California privet hedge.
29. Pin oaks, planted forty feet apart between curb and sidewalk.
In addition to planting shown on plan, the following vines are to be planted to shade porch: Hall's honeysuckles, Crimson Rambler roses, Chinese wistaria and <i>Clematis paniculata</i> . <i>Ampelopsis Roylei</i> is to be planted to cover brick walls of house. |
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PLAN FOR A SUBURBAN LOT .

AN IDEAL SUBURBAN ACRE

The unusual location of the house in the accompanying plan probably makes it impracticable for a majority of suburban acres, but it serves to show some correct principles of arrangement and planting, and that is about all any plan can show, except for the special grounds for which it is designed; for good plans cannot be had ready-made but must be made to order, and all local conditions and limitations considered. The many desirable features of the plan I think are evident. By locating the house close to the northern boundary of the lot, a southeast corner one, the greatest possible unbroken expanse of lawn is obtained, and all principal rooms of the house have a southern and eastern exposure. The massed planting on the western and northern boundaries gives protection to house and grounds from wintry winds, affords grateful shelter for the choicer shrubs and plants, and secures privacy for the rear of the house, drying ground and stable. The driveway—and driveways are now usually made so as to serve the double purpose of driving and walking—gives entrance from one street and the curved path from the other. This path, winding in among the shrubbery, affords opportunity for some very effective planting. Massed planting of shrubs, while the very best arrangement for them, gives many chances for the planting of groups of herbaceous plants, narcissi, and lilies in the margins, and no better setting can be had for the splendid new flowering cannas. The grounds are to be inclosed with a fence, low wall, or hedge,—preferably a hedge if properly planted and cared for,—and for grounds of this size no more satisfactory hedge can be planted than California privet (*Ligustrum ovalifolium*). It is quick-growing and has a rich, lustrous green foliage, and it is almost evergreen. The plan ignores bedding plants, with the exception of the beds of cannas and carpet-border in front of the porte-cochère, a very appropriate place for a bit of formal gardening; but where the annual expense of bedding is objectionable, the cannas could be changed for tall hardy grasses and the carpet-border for one of tulips carpeted with *Phlox subulata*, or it might be omitted altogether. Nine-tenths of the bedding done detracts from, rather than adds to, the grounds it is intended to beautify, and is an annual waste of money, which, if spent intelligently in carrying out a good design, would in time make a sylvan paradise of many a suburban home.

EXPLANATION OF PLAN

1, 1, 1. Shrubs, with hardy plants and spring-flowering bulbs planted in margin.	8. Purple beech.
2, 2. Rhododendrons, kalmias, small evergreens and lilies.	9. Evergreens and birches.
3. Border for herbaceous plants and spring-flowering bulbs, or could be used for hybrid perpetual roses.	10, 10, 10, 10. Scarlet maples; can be used for clothes-line when large enough.
4. Untrimmed hedge of hemlock spruce.	11. Hemlock spruce.
5. Untrimmed hedge of lilacs.	12. Weeping dogwood.
6, 6, 6, 6. Posts covered with vines for clothes-line.	13. Wier's maple.
7. Bed of new flowering cannas and carpet-border of alternantheras, echeverias, etc.	14. Pin oak.
	15. Tulip tree.
	16. Magnolias.
	17. Chinese cypress.
	18. Rose-flowered Japanese weeping cherry.
	19. <i>Magnolia stellata</i> .

AN IDEAL SUBURBAN ACRE

AN IDEAL SUBURBAN ACRE, *continued*

- 20. Cut-leaved birch.
- 21. Fern-leaved beech.
- 22. Japan maples.
- 23. *Funkia Sieboldiana*.
- 24. *Eulalia gracillima*.
- 25. *Weigela candida*.
- 26. Evergreens, small trees and shrubs.

- 27. Maples, pin oaks or tulip trees.

In addition to planting shown on plan, Japanese honeysuckles, *Clematis paniculata*, and *Clematis Henryi* are to be trained on the porch, and a Chinese wistaria is to be carried up the east end of the house, trained along the eaves.

TWO SMALL PLACES TREATED AS ONE

It is now quite common in suburban neighborhoods to do away with all fences and make one continuous lawn in front of the houses of an entire block. I am opposed to this, except for small lots of less than one hundred feet frontage. The inclosure need not be a fence or a wall; much better effect can be obtained by a hedge. The continuous lawn plan does not permit grounds to have individual character or privacy, and I think privacy is as desirable on a lawn as it is in the living-rooms of the house. Sometimes, however, the grounds of two or three small places may be combined and treated as one place, and fine landscape effects obtained which would not be possible with the separate places. The accompanying plan, made for Mr. W. J. Butterfield, of Plainfield, N. J., illustrates this very well.

EXPLANATION OF PLAN

1. Edge of woods back of grounds.	15. Cut-leaved birch.
2, 33. Rows of old Norway spruce, twenty feet high, which were allowed to remain, as they protected the grounds on the north and west, but the regularity of their outline was broken by additional planting.	16. <i>Paulownia imperialis</i> .
3. Purple beech.	17. <i>Abies concolor</i> .
4. Border of hybrid perpetual roses, herbaceous plants and spring-flowering bulbs.	18. Mugho pine.
5. Group of Japanese maples, retinisporsas, and specimen shrubs, ground carpeted with Hall's and golden honeysuckles.	19. Nordmann's fir.
6. <i>Magnolia conspicua</i> .	20. Massed planting of deciduous and evergreen shrubbery.
7. <i>Sciadopitys verticillata</i> .	21. Fern-leaved beech.
8. <i>Magnolia parviflora</i> .	22. <i>Magnolia Lennei</i> .
9. Shrubs.	23. Japanese snowball.
10. <i>Abies concolor</i> .	24. Specimen rhododendron.
11. Nordmann's fir.	25. <i>Picea alba carulea</i> .
12. Colorado blue spruce.	26. White-leaved weeping linden.
13. European beech.	27. <i>Magnolia stellata</i> .
14. Massed planting of shrubs, evergreen and deciduous.	28. <i>Cedrus Atlantica glauca</i> .
	29. Weeping hemlock.
	30. Specimen rhododendron.
	31. <i>Magnolia Soulangeana</i> .
	32. Group of white birch.
	34. Philadelphus and <i>Weigela candida</i> .
	35. Pin oak.
	36. Tulip tree.

TWO SMALL PLACES TREATED AS ONE

PLAN FOR A LARGE CITY PLACE

The accompanying plan, designed by Mr. Caparn, I think an especially good one—very original and artistic—and, properly carried out, would make a very charming garden. It is designed for a city home, rather than a country one, where it is desirable to secure privacy from numerous pedestrians and to conceal from view surrounding streets and buildings. Some would object to the arrangement shown on account of its exclusiveness, but after the making of many gardens I am still of the opinion that privacy is one of their best qualities. Mr. Caparn explains his plan as follows:

"This plan is for a place of average shape and about two and a half acres in area. The unusual location of house and lines of walk will show that economy of space is quite consistent with convenience and breadth of effect. Picturesqueness is obtained by arrangement of planting, not by meandering of sinuous ribbons of gravel. By placing the house in the corner the greatest possible extent of unbroken lawn space is secured, while the porch fronting the lawn is as private as it could be on a place of this size. The lawn runs up to the house unimpaired by any stripes of arid pavement, and the lines of the house are relieved only by the creepers covering it (Boston ivy on the walls and clematises, wistarias and Hall's Honeysuckles on the porches) and the tall conifers to the south of the house.

"This kind of design is suited only to land level, or approximately so, but within those lines could be easily adapted to many places. An ideal contour map would show the lawn gently sloping from all sides to the middle, with the walks on level ground. Along the front boundary runs a wall or iron fence; the entrance is through iron gates into a court large enough to admit of a carriage being turned. There is a smaller gate, admitting pedestrians to a paved walk leading to the front and back of the house. The carpet-bedding on each side of the entrance court is justified by the formal lines of building and macadam which it supplements. The shrubbery behind it sets it off and separates it from the main part of the grounds. The drying ground is inclosed on three sides by a hedge or vine-covered trellis. The stable is placed at the corner of the vegetable garden and entered from a side street, thus being kept entirely away from the house; but if the place were not on a corner the stable could be placed opposite the drying ground and the paved walk widened to allow the passage of vehicles.

"The interest and value of the vegetable garden could be added to by borders of annuals, herbaceous and tender plants for cut-flowers, grape-vines, and dwarf fruits. It is inclosed by a wall. A hedge would be a good protection, would look better and be far cheaper, but would take several years to become an effective defense. If the walks are made wide enough to admit of a horse and cart being used in the garden, six and one-half feet will be wide enough for them, and the inner corners should be rounded a little to allow for turning; in this way manure may be carried to all parts of the garden with great convenience. If desired, breaks could be left in the shrubbery to admit views from the street without injury to the general design."

EXPLANATION OF PLAN

1. Japan maples.
2. *Retinispora obtusa*.
3. Yulan magnolia.

4. *Magnolia parviflora*.

- 5, 5. Shrubbery, with small trees and groups of large herbaceous plants in margins.

PLAN FOR A LARGE CITY PLACE

PLAN FOR LARGE CITY PLACE, *continued*

6. Oriental spruce.	11. Balsam fir.
7. Rollison's arborvitæ, or golden retiniparas.	12. Norway spruce.
8. Nordmann's fir.	13. Colorado blue spruce.
9. Scarlet maple.	14. Purple beech.
10. <i>Andromeda arborea</i> .	15. Irish juniper and beds of herbaceous plants.
	16. Vine-covered summer house.

PLAN FOR GROUNDS OF TWENTY ACRES

The accompanying plan is that of the grounds of Mr. Henry S. Turner, at Elash, Ill. These grounds are beautifully situated on a bluff five hundred feet above the Mississippi river, and about thirty miles from St. Louis. The grounds are comparatively level except for a steep declivity on the southern boundary, commencing on a line a few feet south of the house, and a valley commencing at path *a*, and extending beyond the northwestern boundary of the grounds. This valley is wooded north of the carriage drive which crosses it from *b* to *c*. The grounds slope gently to this valley from path *d*, and from the road from *e* to *f*.

The steep declivity referred to above extends about three hundred feet south of the house to a sheer bluff above the river. The house is located to get the full benefit of the magnificent river and prairie view, which is only limited by the power of the eye. The pond was a natural one, the outlines of which have been changed. This pond was retained to provide a place to grow aquatics and bog plants.

The grounds are very elaborately planted with a large variety of trees, shrubs and herbaceous plants, and promise to become one of the most interesting and beautiful country places in the west. In addition to the ground shown by the plan, Mr. Turner owns several hundred acres adjoining, which is devoted to a stock-farm.

EXPLANATION OF PLAN

1, 1, 1. Woods.	10. Path from house to farm, with flower border on both sides, planted with hybrid perpetual roses, herbaceous plants, spring-flowering bulbs, summer-blooming bulbs, and annuals.
2. Steep declivity, planted principally with evergreens, but some open spaces left, in which wild roses and other native plants are naturalized.	11. Summer house.
3, 3, 3, 3, 3, 3. Trees and shrubs.	12. Pump-house.
3a, 3a. Shrubs.	13. Ice-house.
4. Trees, principally deciduous, but with a few groups of evergreens.	14. Office.
5, 5. Rhododendrons and coniferous evergreens.	15. Greenhouse.
6. Large evergreens.	16. Lodge.
7. Hemlock spruce.	17. Pond for aquatics, with groups of shrubs and trees planted around it.
8. White birch and hemlock spruce.	18. California privet hedge.
9. Bed of <i>Arundo Donax</i> and <i>Eulalia gracillima</i> .	19. Lombardy poplars.
	20. Grape-arbor.

PLAN FOR GROUNDS OF TWENTY ACRES

A PLEA FOR HARDY PLANTS

PLAN FOR GROUNDS OF SIX ACRES

The accompanying plan was made for the grounds of John Markle, Esq., Jeddo, Pa. As these grounds were surrounded by the various buildings of a large colliery, the first consideration was to make the grounds as private as possible and shut out the unsightly objects that were in view in every direction; although I hold that privacy is always as desirable on the lawn and in the garden as it is in the living-rooms of the house, and secure for the family and its friends much freer and greater enjoyment than when the grounds are fully exposed to the highway. In the present instance privacy was secured by massed planting of shrubs and by a hemlock hedge completely surrounding the grounds.

The landscape gardener often finds that his lawns are spoiled, in spite of his advice, by being cut up for flower beds by some ambitious gardener anxious to show his skill in making colored lines of coleus, alternantheras, and other tender plants. Such a contingency is provided for in this plan by making an inclosed formal garden for bedding plants in summer and Dutch bulbs in spring, and this garden in no way spoils the repose of the lawns. It is inclosed by a hedge of Siberian arborvitæ and massed planting of shrubbery, and must be visited to be seen.

EXPLANATION OF PLAN

1, 1, 1, 1, 1, 1. Massed planting of deciduous and evergreen shrubs.	22. Evergreens, rhododendrons, and <i>Kalmia latifolia</i> .
2. Specimen shrubs.	23. Formal garden for bedding plants and spring-flowering bulbs.
3. English beech.	24. American beech, liquidambar, and tulip tree.
4. White-leaved linden.	25. Scarlet maple.
5. Nordmann's fir.	26. Group of Japanese crab apples.
6. Cut-Leaved Japan maple.	27. Wier's maple, pin oak, English beech, black walnut, and white oak.
7. Group of <i>Aralia Japonica</i> .	28. Tulip tree, <i>Magnolia macrophylla</i> and scarlet maple.
8. Scarlet maple.	29. Group of deciduous trees.
9. <i>Eulalia gracillima</i> and yuccas.	30. Mass of wild crab apples.
10. Group of small deciduous trees.	31. American elm.
11. Nordmann's fir and Colorado blue spruce.	32. White, scarlet, and pin oaks.
12. Specimen shrubs, evergreens, and Chinese magnolias.	33. Summer house.
13. Deciduous trees and evergreens.	34. Rockery on both sides of path leading into woods.
14. Group of Chinese and Japanese magnolias.	35. Group of evergreens.
15. Scarlet oak.	36. Lombardy poplars.
16. Scarlet oak, weeping cypress, and weeping Norway spruce.	37. Border of annuals.
17. Sugar maple.	38, 39. Border for hardy perennials.
18. Tulip tree.	40. Border of hybrid perpetual roses.
19. Fern-leaved beech.	41. Bed of <i>Arundo Donax</i> and <i>Eulalia gracillima</i> .
20, 20. Pin oaks.	42. Lilacs, assorted.
21. Evergreens and white birch.	

PLAN FOR GROUNDS OF SIX ACRES

PLAN FOR GLEN COVE RAILROAD STATION

Some of the railroads, notably the Pennsylvania and one or two of the New England companies, have been devoting considerable attention, of late years, to gardening along their lines. Station-grounds have been beautified, and the steep banks made by grading cuts have been planted with vines and shrubs. This work is not costly, and is a distinct gain to the companies by making their roads more attractive to travelers and the seekers of suburban homes, and in the case of steep banks saves them from loss and trouble by preventing the slipping of loose surface soil, which is very apt to happen after heavy rains, or when the frost comes out of the ground in the spring on unplanted banks.

The present plan was made for the station-grounds at Glen Cove, Long Island, near which station are the country homes of many wealthy New York people. These grounds are much larger than those usually surrounding suburban stations; but I believe the residents joined the railroad company in buying and improving the grounds, and the result is a very attractive little park that is a pleasure and credit to all concerned.

The grounds have been laid out and planted as attractively as possible, but the practical purposes of the station have not been overlooked, and ample space has been left for standing room for carriages at the platforms.

The planting list includes many beautiful trees, shrubs and herbaceous plants, but all of easy culture,—things requiring care, of course, but not the care of an expert. It may be interesting to know that the famous "Dosoris" is near this station, and to this Glen Cove owes much of its progressive spirit.

EXPLANATION OF PLAN

1. <i>Magnolia macrophylla</i> .	22. Oriental sycamore.
2. Scarlet oak.	23. Weeping rose-flowered Japan cherry.
3. <i>Magnolia conspicua</i> .	24. American elm.
4. Nordmann's fir.	25. <i>Salix pentandra</i> .
5. Sugar maple.	26. Group of hemlock spruce.
6. <i>Abies concolor</i> .	27. White-leaved linden.
7. Wier's maple.	28. <i>Malus Halliana</i> .
8. Silver maple.	29, 29. Massed planting of trees and shrubs.
9. <i>Picea polita</i> .	30. Pin oaks planted fifty feet apart, with
Carolina poplars planted alternately.
The poplars, which are of extremely
rapid growth, are to be cut out as soon
as the pin oaks are of an effective size.
10. White-leaved weeping linden.	31. White ash planted fifty feet apart and
Carolina poplars planted alternately,
to be treated as noted above.
11. Colorado blue spruce.	
12. Groups of white birch.	
13. Cut-leaved birch.	
14. <i>Magnolia conspicua</i> .	
15. <i>Magnolia parviflora</i> .	
16. <i>Magnolia Soulangeana</i> .	
17. Tulip tree.	
18. Oriental spruce.	
19. Douglas' spruce.	
20. <i>Abies Cephalonica</i> .	
21. American elm.	

In addition to the above a California privet hedge is planted along both sides of the main entrance driveway and along one side of the driveway paralleling the railroad track.

PLAN FOR GLEN COVE RAILROAD STATION

PLAN FOR SUBURBAN LOT 75x160 FEET

It is usually thought the small suburban lot is unworthy of the landscape gardener's skill; but I think the accompanying plan, which is for a lot 75 x 160 feet, or about one-fourth of an acre of ground, proves the contrary. This plan gives what is not always found in larger places—small but good lawn effects, a considerable variety of choice plants and shrubs, changing effects from spring until fall, and outdoor privacy for the family and its friends.

The present plan ignores bedding plants, with the exception of the French cannas against the front porch, and I am inclined to the opinion that *Eulalia gracillima* (that lovely tall Japanese plumed grass,) with a border of Siebold's funkia, would be better and would make the entire planting of a permanent character. The new French cannas, such as Mme. Crozy and Alphonse Bouvier, are, however, despite their one fault of fading in hot sunshine, fine enough for any grounds, and their splendid coloring in September and October reconciles us to their summer weakness. A disagreeable feature of almost every small place is the use of four ugly turned posts for the clothes-line. These can be avoided by using saplings of about eight inches in diameter, cut to a proper length, and the branches shortened to about five or six feet. These can be covered with such vines as trumpet creeper, Chinese wistaria, or Hall's honeysuckle, and so arranged as to form part of the garden design.

EXPLANATION OF PLAN

1. California privet hedge.	5. White birch.
2. Border of hybrid perpetual roses and hardy herbaceous plants.	6. Single hollyhocks.
3. Scarlet maple.	7. Rhododendrons, with <i>Lilium auratum</i> planted among them.
4. Shrubbery, with groups of herbaceous plants in margins.	8. New French cannas, or <i>Eulalia gracillima</i> and <i>Funkia Sieboldiana</i> .

PLAN FOR SUBURBAN LOT, continued

9. *Retinispora plumosa aurea* and *Andromeda floribunda*.
Retinispora is to be kept sheared to not over three and a half feet high.

10. Japan maples.
11. *Magnolia stellata*.
12. *Magnolia conspicua*.
13. Posts covered with vines for clothes-line.
14. Pavilion.
15. Low stone wall, partly covered with vines (*tropæolums*).

In addition to planting shown in plan, three pin oaks are to be planted between the side-walk and curb.

PLAN FOR HARDY PLANT BORDERS

The accompanying plan is designed to be used on both sides of a walk. These borders would be equally suitable for placing in front of a wall or hedge. The walk, instead of being gravel, might be one of grass, making the entire space between the borders grass, and this would be much more effective.

As hardy borders are intended to be permanent, the initial preparation of the soil should be liberal. The border should be dug out to the depth of two feet, preferably two and one-half feet, and filled with all good surface soil mixed with one-fourth its bulk of thoroughly rotted stable manure. After planting, the border should be mulched with two inches of stable manure late every fall, care being taken that the tops of no evergreen plants are covered, as it would cause them to rot.

Borders planted as shown in plan will give a succession of bloom from early spring until fall, but the hardy plants and bulbs should be supplemented by plantings of annuals, such as Shirley poppies, *Phlox Drummondii*, nasturtiums, sweet alyssum, and asters, and the narrow strip for bulbs in front of the borders might be planted entirely with forget-me-not, which would not interfere at all with the growth or bloom of the bulbs.

PLAN FOR SMALL SUBURBAN GROUNDS

These grounds are, for the greater part, practically level, but have an elevation of about forty feet above the street they front on; the front of the grounds being a steep embankment covered with a natural growth of trees and shrubs. The road shown at the side of the grounds is a right of way which gives entrance to three or four contiguous places.

Privacy is secured for the front lawn by the topography of the ground, by the mass of shrubs and by hedges. This lawn is two feet higher than the level of the carriage road, and entrance is gained to it by steps through the hedge, which extends from side of house to boundary of grounds. Designed for F. H. Russell, Esq., Edgeworth, Pa.

These grounds, although only half an acre in extent, have proven most successful, due as much to the enthusiasm of the owner as to a good plan faithfully carried out. Many large places are less effective and comprehensive. A very successful flower and vegetable garden is a feature, and some fruit is grown. The shrubberies contain a good assortment of varieties, and the little lawn is quite perfect. The natural topography of the grounds, which has been undisturbed, adds greatly to their beauty.

EXPLANATION OF PLAN

- 1, 1, 1, 1. Massed planting of shrubs.
- 2, 2. Hardy perennial plants.
3. *Arundo Donax* and *Eulalia gracillima*.
4. Vines and shrubs to cover steep bank.
5. Natural growth on steep embankment.
- 6, 6. California privet hedge.
7. California privet hedge.
- 8, 9, 10, 11, 12, 15. Fruit trees.
- 13, 13. Grapes on trellis.
- 17, 18, 19, 20, 21. Posts for clothes-line.
22. Tulip tree.
23. Pin oak.
24. Purple beech.
25. English beech.
26. Scarlet oak.
27. *Magnolia Soulangeana*.
28. Japanese snowball.

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