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CONTINUOUS BLOOM IN AMERICA
-
G'ontinuons bloom from mid-Nay until front
"Cherryeroft," Murristurni, N. J., Dulley Oleoll, Esq.

## CONTINUOUS BLOOM IN AMERICA

WHERE, WHEN, WHAT, TO PLANT WITH<br>OTHER GARDENING SUGGESTIONS

BY<br>LOUISE SHELTON ATTHOR OF

"the seasons in a flower garden"

NEW YORK<br>CHARLES SCRIBNER'S SONS 1916

Oofyright, 1915, by CHARLES SCRIBNER'S SONS

Published August, 1915


DEDICATED
TC
KINDRED SPIRITS IN THE GARDEN-MY FRIENDS KNOWN AND UNKNOWN
"There's something wonderfully soothing in having your fingers in Mother Earth. It seems to take the restlessness out of one.
"The out-of-doors rests you, just like when you were little and things went wrong, and your mother took you in her arms. The fret and the trouble go out, and the quietness and the strength come in. I don't know how it happens, but it does happen, and the touch of the earth has something to do with it. You feel as if the things that had concerned you were curiously unimportant beside the sky and the birds and the growing things, and you come in touch with the wonderful patience of the old earth."
-Frances Duncan.
"When quite well and happy,
Work in the garden because you are glad.
When weary and heart-sick,
Work in the garden because it will rest you.
When it rains,
Work in the garden because then is the time to plant and weed.
When the winds blow,
Work now to save the slender stalks from breaking.
When there is drought,
Work in the garden to save your plants.
When it is winter,
Work now to give sheltering care.
When it is spring,
Work in the garden because everybody does.
When it is summer,
Live in the garden to enjoy the fruits of your labor.
When it is autumn.
Work in the garden because now is the time to transplant, divide, and multiply, and to lay down in the earth the glories for next summer."
"If there is any other time when you cannot find an excuse for working in the garden, remember that it was the first duty and place of man, and that there is no philosophy of life, no beauty of art, which has not its seed in the earth, or can flourish without knowledge of a garden. What, indeed, was the punishment of Adam and Eve but to be driven out of their Eden?"
-Anna Lea Merritt,
"My Garden," from Century Magazine.

## PREFACE

In this my second book on garden lore, I hope as far as possible to avoid repetition in cultural directions, although a few of these may have to be repeated in order to present complete directions for a garden of continuous bloom.

I have not hesitated to admit and correct several mistakes in my last little book, "The Seasons in a Flower Garden," and I also have taken advantage of a woman's privilege to change my mind in regard to the use of a few of the plants recommended. Referring to my first plant list, I no longer use, where continuous bloom is required, several varieties named in "The Seasons." Either because they grow too rampantly, spread too quickly, bloom too early, are too short-lived, or else are too weak in coloring.

The corrections to which I refer are the following:
First. Reddish Helichrysum-a local name-was used instead of Globe Amaranth, of the Helichrysum family.
Second. Silene pendula should read Silene armeria according to American catalogues.

Third. In the first edition of my book, 2 inches of [ ix ]

## PREFACE

clay was advised by mistake for the bottom of a new bed made in sandy ground, whereas 8 inches is none too much, because, to a certain extent, clay next to sand will absorb the sand, or vice versa.

Fourth. Calceolaria was suggested rather hastily and without first trying it in home soil. The author must mention the disappointing venture with this beautiful golden flower, which lends such a brilliant effect to the English June gardens. An attempt to grow it at home from English seed produced plants of many leaves, but with insignificant flowers. Possibly in different soil and moister climate, results might be otherwise.

While my first book was devised entirely to meet the amateur's long-felt want for the ABC of gardening, with fortnightly advice for the untrained gardener, this second book will, I hope, supply the more experienced gardener with a comprehensive scheme for continuous bloom, as well as abbreviated plans in a late chapter for those who would specialize in spring and autumn displays. In addition there are some other garden suggestions which may, I trust, be helpfurl to those who have not as yet gone deeply into this interesting subject.

## FOREWORD

Eight years have passed since I sent out to kindred garden spirits my book, "The Seasons in a Flower Garden." Although my pen has since been idle, my spade has labored on, planting and transplanting, seeking ever a plan more satisfactory than the one given in the sketch of a single planting plan, which appeared in the second and later editions. Finally, after obtaining in a large garden the results for which I had long striven, i.e., complete satisfaction in a continuous bloom throughout a season beginning May 20 and ending with frost, I realized that I was ready to share my working plans with my known and unknown garden friends. What plants to use, Where to place them, and When they bloom, is the scheme I now offer to those who are striving for continuous "all-over" bloom during twenty-six weeks at the longest. Doubtless there are others having somewhat similar plans, who yet must withhold this coveted information, because lacking the opportunity to share it with us.

There is nothing more bewildering than the variety of horticultural advice as to the treatment of certain plants: and while all in their way may be right, it is

## FOREWORD

the different conditions in the various sections of the country which produce such a diversity of opinion. In the garden world, part of its wisdom is to be very liberal and broad-minded. Old-time conventions, socalled infallible rules concerning flowers, are often open to question and change. Some of these rules are not necessarily cast-iron laws, and certain liberties may be taken with a plant in one locality that might be disastrous to it in another place. There are some things that one must learn for himself by experience in his own garden; for instance: the depth of winter covering required; the biennials and hardy annuals that may or may not need to be wintered in frames; the safe time in spring for setting out tender annuals, etc., etc.; all depending on the climate. Again, what plant causes more discussion than the Dahlia? Is it possible, that notwithstanding all the conflicting advice for the benefit of the Dahlia, plentiful watering may be the one important rule for its best development? In many places the following plants, Gypsophila, Dahlia, Lavatera, and Salpiglossis, grow luxuriantly, but in my dry garden, where watering is difficult, it is useless to expect any satisfaction from them. Again, and for other local reasons, it is seldom that August-sown Shirley Poppies survive the winter in the northern exposure of my hillside, and they must be sown instead about April 1, or even upon the [ xii]

## FOREWORD

March snows, for late June bloom. Then again, one person may have a knack in handling some plant successfully where other gardeners invariably fail. A woman I know can transplant a lot of Shirley Poppies with few losses, whereas other gardeners in attempting it, with even the smallest seedlings, probably lose ten out of twelve plants.

Many old-fashioned gardeners are loath to crowd the plants after the manner prescribed in these charts. This method undoubtedly requires a little more supervision to prevent the smothering of the smaller varieties, but at the same time, the shaded soil holds moisture longer and fewer weeds intrude.

There is but little left to be desired in the way of fullest bloom and harmony, if the charted plans in this book are strictly followed. With beds of different sizes, but slight variations will be necessary, depending only on the number of square feet to be utilized. Doubtless for large gardens in moister climate there could be added a few more favorites, some of which are included in the list of "What to Plant," though omitted in the charts.

These eleven plans later presented are duplicates of beds in several gardens where continuous bloom reigns from the opening of German Iris until frost. An intelligent gardener, after a little careful study, and trial, must surely grasp these plans, and, once accom[ xiii ]

## FOREWORD

plished, his garden enclosure will be more than ever his out-of-door home, with each plant friend always in its own familiar place and ever glad to be alive in its appointed time.

If the gardener fails to produce the desired effect, let him first carefully examine into his own methods of procedure before criticising the plans in question.

It has been constantly the author's aim to supply the gardener in the simplest and briefest way possible with the necessary information for the beautifying of his garden. The list under "What to Plant," suggests the plants most useful for this plan of continuous bloom, and contains mainly the names used in the most familiar American catalogues. Important suggestions as to the peculiar needs and habits of these favored plants are also included, but it will be left to the numerous horticultural encyclopædias, complete and abridged, to furnish their full botanical descriptions and histories.

It will be observed that the flower names in this volume are capitalized. As it is a book of instruction, where flower names will be frequently sought, the author adopts this method for the purpose of bringing out the names conspicuously on the pages.

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CONTINUOUS BLOOM IN AMERICA

## Chapter I

## THE SECRET OF CONTINUOUS BLOOM

To understand the scheme of well-balanced, continuous bloom, we must know-

First: The birth dates and longevity of the flowers in our garden, in order to classify them under the several different periods of bloom.

In the country surrounding New York City, at least, the flowering season continues for twenty to twenty-six weeks, or from May 1 to frost, due any time between October 1 and November 1. This long season may be divided into eight periods of bloom, representing the coming and going of the different classes of plants. The blossoming period of most perennials and annuals lasts about three weeks. A few annuals remain for four months and these are invaluable in a garden.

Second: The plan for planting in lines, for the sake of order.

Third: The alternation of two or more flowering periods in these lines, for the purpose of regular and balanced bloom.

## CONTINUOUS BLOOM IN AMERICA

Fourth: The choicest plants to use and their colors and proportions.

No matter how much information one may have acquired concerning the best plants and their habits, it is valueless in the quest for well-balanced, continuous bloom if one lacks the knowledge of the periods of bloom and for the alternation of those periods. Continuous bloom of course is as prolonged as the climate permits and no longer.

WHAT, WHERE, AND WHEN

The secret of well-balanced, continuous bloom depends, therefore, on a definite idea of what flowers to plant, where to plant them, and when they bloom, with the no less important knowledge of the scheme for alternating the several blooming periods, in the straight or circular lines, in broken though regular order, throughout each and all the beds. It is this plan that obtains the effect of a well-balanced bloom over the whole garden, from the beginning to the end of the season. The idea is clearly illustrated in the patterns on many an Oriental rug, where figures in different colors appear in "broken though regular order," in symmetrical and harmonious design.

What to plant, or the right choice of hardy perennials, involves the selection of the most effective and longest blooming varieties, blossoming when most needed, with no space wasted on any others. The [2]

## THE SECRET OF CONTINUOUS BLOOM

most reliable annuals also must be used to fill up the gaps between the various periods of perennial bloom.

It is equally important that most of the annuals shall belong to the class which blooms from mid-June until frost, otherwise bare spaces may confront us. When certain short-lived annuals are indispensable, because of their beauty or usefulness, place them near spreading plants that will later cover their vacant places.

Where to plant includes the placing of plants at regular intervals, and with regard to their season, breadth, height, and color, while the matter of

When they bloom demands the consideration of the various flowering periods in order to allow each period equal representation in every section of the garden.

In later chapters under these three headings there is included the further information as to where and when to sow these plants in order to have them in flower according to the plan.

## A GARDEN WITHOUT ANNUALS

Unless the flowering season is to be of short duration, I have yet to see a satisfactory plan for a perennial garden without any annuals to complete its bloom. When long and continuous bloom is required, a plentiful supply of certain annuals is recommended.

Flower-beds of fairly large dimensions, containing none but perennials, may possibly be kept in bloom

## CONTINUOUS BLOOM IN AMERICA

for a little over eight weeks. But, as most of the perennials take up much room and bloom but a few weeks, it would require more than the space of an ordinary garden-bed to have a long and continuous "all-over" bloom with nothing but perennials.* Another objection to depending altogether on perennials is that the hardiness of some of them is not always to be relied upon. Disease may take them, or if, in an unusually severe winter a quantity are killed, it may be impossible the following spring to replace them satisfactorily. Large grown perennials are difficult to obtain from the nurseryman, and some varieties take three years to develop a strong bloom. Annuals from good seeds never fail to develop quickly; therefore, the perennial bed should be more or less dependent upon a certain number and variety of annuals.

[^0]
## Chapter II

## WHERE TO SOW

## HARDY PERENNLALS-THE OPEN NURSERY

All the perennials that are grown from seed may be started in the open nursery-a propagating space reserved outside of the garden.

Even after the garden has been planted, the nursery should continue to keep in reserve a small supply of well grown plants, especially those of the less longlived varieties, in order to be always ready to replace the possible losses in the garden. The nursery will then serve as well for a picking garden. Many of the plants will self-sow, others will increase by root-spreading, and the difficulty will be to keep a small nursery within bounds, if pests or extreme cold do not interfere. To know the plants for the nursery, see the chapter on "When to Sow."

For a new garden, it is well to begin sowing in the nursery of perennials at least a year in advance of the planting, unless well developed hardy perennials can be purchased of the nurseryman, an expensive method

## CONTINUOUS BLOOM IN AMERICA

of stocking a garden which may not appeal to the average gardener.

Some of the favorite plants* should be two years old before they are considered large enough to be admitted to the garden, where only strong bloomers are desired. This rule is not only important for the purpose of obtaining the full color effect the first year, but also because the slower growing young perennials in a crowded border are so insignificant that they may be overlooked and hoed up by a careless gardener, or else smothered by larger neighbors.

## PLANTS BY PURCHASE

When a full-grown garden is wanted at once, unless economy forbids, the quickest way to secure it, of course, is to purchase in large plants from a nurseryman all that is required. But if these plants should come very small, turn them into the nursery for a year or two; even this will be quicker than raising at least the slow-growing varieties from seed.

If the plants have to mature in a nursery, a garden of annuals for one or two seasons would be an interesting experiment.

Remember that in planning for just one fair-sized clump of certain kinds of plants, it will take from three to ten single nursery plants set near together to form

[^1]

[^2]
## WHERE TO SOW

the clump, i.e., Phlox, hardy Asters, etc. With most plants of the rapid root-spreading nature, it will take one year for a small plant to triple its size.

The only perennials named in this book, not belonging to this quick-spreading variety, are Lupin, Sweet William, Dictamnus, Columbine, Sedum, Delphinium, Platycodon, Foxglove, Hollyhock, Pyrethrum hybrid, Anchusa, Statice, Salvia azurea, Poppy, Enothera, Gaillardia. All the rest named are fast root-spreaders, which, once well started, will need to be divided every two or three years (Peonies every five years).

## WHERE TO SOW-ANNUALS

When considering where to sow his annuals, the gardener should remember that part of the scheme for continuous bloom necessarily depends also on when they are to be sown.

## THE NURSERY

A nursery of some kind, for certain annuals at least, is indispensable to a garden of continuous bloom; preferably in frames where they are more easily handled. But when frames are not available, then a bit of open ground somewhere for an open seed-bed and nursery should be included in the gardener's calculations.

A nursery for the August-September sown hardy annuals is a necessity. A frame is required for wintering some of them in a cold climate. See "When to Sow."

## CONTINUOUS BLOOM IN AMERICA

The under-glass sowing of certain useful annuals, by April 1 or earlier, brings their first bloom by mid-June when they are needed. (See lists on pages 34 and 37.) If possible, one or more frames with glass sashes should be used for the purpose of hastening the growth of these special spring-sown seeds.

Near New York, as a rule, the cold-frame cannot be safely used for spring-sown annuals much before April 1, but it is well not to delay sowing much beyond that date. Sowing is usually begun in the hotbed by March 1.

If, however, there are no conveniences for them in greenhouse, hotbed, or cold-frame, we must be content with less late June bloom. We shall then sow all the annuals out-of-doors at the proper season,* to await germinating time, which differs slightly with the different plants, according to their nature and hardiness, and depending on the climate in the open. Lacking the facilities for coaxing certain ones to bloom by mid-June, then around July 1 there will be more than ever needed the fall-sown Anthemis, Feverfew, Larkspur, and Canterbury Bells (C. medium), and if possible some well-grown Snapdragon.

Even on the smallest plot of land, a seed-bed and nursery, whether in the open or within frames, can be satisfactorily managed if the gardener will economize space by not sowing the entire contents of a package of seeds, when but half the amount is required.

[^3]
## WHERE TO SOW

Use the nursery space for certain annuals in sufficient number to supply the definite places awaiting them in the garden, omitting from the nursery such varieties as can better be sown in the garden-bed.

The richer and finer the soil, the faster will the seedlings develop. Sufficient watering, not more and not less, is another important nursery rule.

Though the nursery start necessitates some extra work on account of transplanting, to any valuable possession a certain amount of trouble and responsibility is attached; and a well planned nursery behind a garden of continuous bloom means only a reasonable expenditure of effort with endless satisfaction as the reward.

When the problem of limited space is absent, how fortunate the gardener! Under glass and in the open, he may then sow freely for the garden, the "picking" garden, and the friend's garden.

## SOWING IN THE GARDEN-BED

As elsewhere stated, all annuals named in this book excepting Heliotrope, Begonias, etc., may be sown in spring where they are to bloom, when early flowering is not required of them. See footnote, page 8.

And again, it is perhaps needless to add, there are some annuals which are always sown in the gardenbeds, because they do not transplant well. These are Cleome, Poppies, Candytuft, Nasturtiums, an[ 9 ]

## CONTINUOUS BLOOM IN AMERICA

nual Lupin, Lavatera, and Eschscholtzia; while Calendula, Calliopsis, Painted Daisies, and annual Gaillardia, often troublesome after transplanting, had better be sown in their places too.

Generally Sweet Alyssum is sown in the garden, but sometimes in the nursery when the early Pansies are occupying too much of their space at the edge of the bed. Sweet Alyssum transplants very well, and with plenty of watering can replace the Pansies at any time, when the latter must be replaced.

Experienced horticulturists believe that the selfsown plants, either annuals or perennials, are the hardiest, and most likely to produce the strongest possible bloom, especially when not transplanted. For this reason, it is sometimes advisable to allow a few flowers of the self-sowing varieties to go to seed, and when the young plants must be moved, the earth should be soaked, and kept intact about the roots.

Except with a few varieties of annuals, it is easier to sow and care for a quantity of seedlings in the limited space of a nursery, and then to transplant them when older into the beds, than it is to sow them in the garden where they are to grow, and there to try to watch and care for such young things in beds already well occupied with large plants. In the latter case many seedlings will suffer from shading. But this advice does not necessarily apply to the lowgrowing annuals for the front of a bed; for instance,

## WHERE TO SOW

when Pansies edge the front line, it is often pussible to sow Sweet Alyssum or Portulaca 6 inches back from the centre of the Pansy plants, to be ready to bloom when Pansies are no longer at their best and can be discarded.

The Pansies should be planted within 3 or 4 inches of the edge. If they creep over the line all the better. Calliopsis, var. Golden Wave, Calendula, Gaillardia, Painted Daisies, and Nasturtiums, may be sown likewise around Sweet William and Tulips in order to replace them later. The latter are cut down three or four weeks after bloom: Sweet William may be discarded when bloom begins to fade.

## Chapter III

## WHERE TO PLANT

The alternation of several periods of bloom PLANTED IN LINES IS THE MAIN POINT IN THE SECRET OF WELL BALANCED, CONTINUOUS BLOOM.

In order to economize room, and to systematize the scheme to an orderly plan for giving the various blooming periods equal representation throughout the space of one bed, plant in lines, and alternate in the lines the plants of several different periods: for instance, in one line alternate several times the plants of May and June, or else of May, June, and July, i. e., Lupins, Campanula medium, Foxglove, repeated two, three, or more times.

Other plants of the same periods may appear in alternation in another line, while still other lines will show the alternate setting of other blooming periods either with annuals, with perennials, or with both.

At each period have more than one line in flower at a time (not every plant in the line), and always with care that the front bloomers do not conceal those behind.

## WHERE TO PLANT

## OPEN BEDS AND WALL BEDS

Bed Space.-Long, continuous, balanced bloom with perennials and annuals in small beds is a difficult proposition, and it is best to plan a garden, if possible, with beds of rather large dimensions when plenty of perennials are desired. An exception may be made when a bed is against a wall, which can be planted effectively if only 4 feet deep, but a larger space is preferable because easier to plant.

The planting plans for the beds which are open, on view from all sides, differ somewhat from those for beds adjoining a boundary wall or hedge.

For convenience' sake the beds that are open on all sides will be called open beds, and the beds adjoining a boundary line or wall which forms a background, wall beds.

THE OPEN BED LONG AND NARROW
In the open bed, the centre space where the tallest plants grow might be considered as the background. Unless the bed is quite wide, as in Chart VII, the centre of any open bed should not contain the very tallest plants, e. g., early Cosmos.

When the open bed is much longer than wide, for instance, $71 / 2$ by 28 feet (Chart IV), plant the middle line with the moderately tall plants of four alternat[ 13 ]

## CONTINUOUS BLOOM IN AMERICA

ing periods of bloom repeated several times. Study the periods in chapter VI. See Plate III.

On either side of the middle line have two corresponding identical lines of plants of two or three different periods, set out in repeated alternation, and of somewhat lower growth than those in the centre line, preferably of annuals in a bed as narrow as 7 feet. If these annuals are as slender in form as Campanula medium, Snapdragon, and Larkspur, another close row of slender annuals might be snuggled in front of them, such as Salpiglossis, Vinca, Scabiosa.

Next in order on two corresponding sides of the bed run a line of perennials in three alternating periods.

Finally the bed should be bordered with low annuals.
About a foot back from the edge of the bed there will be room for the brief bloom of Cottage Tulips.

While advising the gardener in search of continuous bloom with perennials and annuals not to lay out long open beds as narrow as 3 or 4 feet, on account of the extra amount of work necessary to care for so many plants in a crowded area, and the difficulty in keeping the early perennials from being smothered, the illustration on page 24 should not be overlooked. The planting is entirely within open beds which are but $31 / 2$ feet wide by 18 feet long. Chrysanthemum is the only perennial used after June. The planting is explained on pages 24 and 25.


Late June bloom
"Riverside Farm," Tyringham, Mitsa, Mra. Banyer Clarkson


Long open bed $71_{2}$ feet wide, right side path
"Glen Alpine," Morristown, N. J., Mrs. C. W. MeAlpin

## WHERE TO PLANT

LARGE OPEN BEDS, SQUARE, ROUND, OR OVAL
In a good-sized open bed, square, round, or oval, i. e., 12 or more feet in diameter (Charts VI and VII), the straight lines, already described in the 7 by 28 foot bed, become circular lines around a centre space, which centre forms the background of such beds. This centre measures from 2 to 3 feet in diameter, and contains within its space two sets of tall plants: First, a mass of spring flowers like Bluets (fall-sown) or else three Lupins in a group with a few Cottage Tulips -all tall for that period around June 1. Later, there follows some ever blooming variety of annual, like Zinnia, Marigold, or early Cosmos. Several plants of any one of these varieties are placed around and close to the outer lines of the centre space to spread over it when early bloom is past, and Bluets are removed. If perennial Lupins form the centre group, they are not removed, but are unlikely to suffer from this shading. If necessary to prevent crowding, a little of their foliage could be nipped off.

Then the other lines encircling this bed (supposing it to be 12 or 14 feet in diameter) can be planted somewhat similar to those in the long 7 by 28 foot bed, only on circles instead of on straight lines. (See Chart VI.) When the diameter of the bed is over 14 feet, then plant additional circular line or lines of alternating plants, allowing one extra line to every $21 / 2$ feet of diameter.

## CONTINUOUS BLOOM IN AMERICA

SMALLER OPEN BEDS, SQUARE, ROUND, OR OVAL
In the case of the smaller round, square, or oval bed, measuring in diameter 10 feet or less, it is difficult to use a long succession of perennials to advantage, unless some of them are removed after blooming, which disturbance probably will kill them. A few Chrysanthemums, lower Delphiniums, and Agrostemmas might be used, but prepare chiefly for annuals and Tulips. In the middle of a bed, 8 to 10 feet diameter, for first bloom, have a close mass of Bluets and Silene within an 18 -inch square. Later, replace them with September flowering Chrysanthemums, h. p. For the early season the bed is edged with Pansies and English Daisies, and close behind them are Cottage Tulips, alternating with Sweet William, discarded after bloom. The Sweet William and Cottage Tulips are later replaced with Petunia, Ageratum, Verbena, or Heliotrope.
The Pansy* space is later an overflow for Petunias or others on the adjoining line.

Behind the Petunia line for later bloom are Scabiosa, Salpiglossis, and Snapdragon. And to the rear, still another line of alternating fall-sown Larkspur, dwarf Zinnia, and Canterbury Bells, encircling the central Silene-Bluet group. See Chart VIII.

Taken from pots or with roots balled, Chrysanthe-

* Where the season opens late, Pansies and Daisies may be omitted.
[16]


## WHERE TO PLANT

mum, Heliotrope, etc., are easily moved at any time in June or July.

Beds of these proportions as well as smaller beds are also often filled with the lower annuals of one or two varieties, i. e., first Pansies mixed with English Daisies, and later a mass of some long blooming variety, such as Petunia, or else blue Ageratum edged with white Ageratum, or pink fibrous Begonia bordered with Sweet Alyssum.

To make a close connection between the Pansy, and, for instance, Petunia bloom, the following suggestion is offered. Pansies may have been planted out about May 10 or earlier, Petunias were started under glass April 1. When Pansies shall have bloomed about six weeks, their best days are over in warm climates, so remove every other Pansy plant, replacing them with Petunias, which as yet are not old enough to be effective, but there is still some Pansy bloom left.

When the Petunias begin to branch and bloom, the remaining Pansies are ready for removal, and all the spaces are soon covered with the tireless Petunia. Because Ageratum and Verbena are likewise sprawling plants, they can be used instead of Petunia, if preferred.

It would be possible also to sow in May the seeds of Petunias or dwarf Calliopsis or Calendula, or other quickly germinating seeds around the Pansies, trim-

## CONTINUOUS BLOOM IN AMERICA

ming the latter slightly to give light to the seedlings; but on account of the crowded quarters this is not as likely to be a satisfactory method.

## SEVEN FEET DIAMETER

In this small bed a plan similar to Chart VIII may be adopted, except that the centre space should be smaller and one line omitted. Zinnias might also be omitted and replaced with Snapdragon. Then put Sweet William in the Snapdragon place on Scabiosa line, and scatter Tulips over the bed, setting the Pansies close to the Scabiosa line. These smaller beds are more satisfactory when filled with one or two varieties of long blooming annuals.

## Summary

## Open Beds, Longer than Wide-

Width, 7 feet or more: Use perennials and annuals.
Width, 6 feet or less: Perennials difficult to handle.
Open Beds, Round, Square, Oval-
Diameter, 12 feet or more: Use perennials and annuals.
Diameter, 7-10 feet: Use a few perennials, preferably annuals 4 feet high and less, and bulbs.
Less than 7 feet: Use annuals and bulbs.

## THE WALL BED

In the wall bed the tallest perennials and annuals are, of course, placed in the rear line against the background, whatever it may be. The plants in the [18]

## WHERE TO PLANT

other lines graduate in height, down to the lower edging of the bed.

It is no more difficult to plant effectively with perennials and annuals the long wall bed, only 4 feet wide, than it is to attain the desired effect in the wider 7 by 28 foot open bed. This statement is not for the purpose of advocating a 4 feet wide wall bed, as one wider is preferable; but observe that in the open bed, after leaving the centre, each line is duplicated in order to give a well balanced effect to the beds. This question of keeping the balance on both sides of the open bed complicates the work of planting it. The wall bed is different in this respect, and easier to handle.

The wall bed, like other beds, can have Pansies for early bloom in front, followed by some long-lived annuals to make an effective finish and to bloom without intermission until frost.

Near the front of this bed there should appear a taller row of annuals or perennials, possibly 15 inches high, of three alternating periods. Farther back, another line of annuals, or else annuals and perennials.

Then at the rear of the wall bed a line of still taller growth, such as early Cosmos or Miniature Sunflowers, mixed with the tall perennials against the background.

The foregoing suggests a plan for the narrowest possible wall bed containing perennials and annuals.

CONTINUOUS BLOOM IN AMERICA
(See Chart I and Plate IV). A wider bed with additional lines will be all the more effective. See Plate IV.

Another plan for continuous bloom in a narrow (4-foot) bed against a background is the following:

Rear Line.-Alternate Lily candidum* and Oriental Poppies. In a very long bed add to the line three, tall Delphinium, one at each end and one in centre. Two Cleome seeds may be sown in each Poppy space, when the latter die down.

Next Line.-Alternate Anchusas Opal and tall Zinnias; in a very long bed, add to the line three groups of pink Cannas in front of Delphiniums (three Cannas to a group).

Next Line.-Fall-sown Larkspurs and Canterbury Bells, alternating.

Front Line.-Late Tulips, with Sweet Alyssum sown early.

## SPACES REQUIRED FOR PERENNLALS AND ANNUALS

In a full garden of continuous bloom, root-spreaders like the Phloxes cannot be allowed to attain very wide proportions, unless the beds are spacious. A safe rule would be to keep the Phlox clump down to about twelve shoots, except in a very large garden.

A later chapter on "What to Plant" mentions the number of single plants or shoots that certain clumps

[^4]

Wall bed 4 feet wide
"Glen Alpine," Morristown, N. J.


Wall bed 7 feet wide
"Onunda," Madison, N. J., Mrs. D. Willis James

## WHERE TO PLANT

may ordinarily average. Read also section on "Plants by Purchase," page 6.

With the non-spreaders, such as Lupin and Foxglove, in small beds it may not be possible to use more than one plant to a space, but in a roomy bed we should endeavor to group two or three such plants, 8 to 10 inches apart whenever the allotted space can be made to contain them.

It is difficult to indicate in inches or feet the exact space to be allowed each plant, the area varying from 6 to 24 inches. (Peonies and Dahlias take 3 feet.) A good average, however, might be 15 square inches. At the rear of a wall bed, where the strongest perennials grow, full 18 inches separation is a safe rule, and when the outer foliage of Hollyhock, Delphinium, or Monkshood encroaches, it can be cut off.

When such annuals as early Cosmos and Miniature Sunflower are added to the rear hardy line, the full 18 inches need not be allowed them, as they make their spread farther up and require less room at the base. By late July these annuals, placed adjoining Hollyhocks and Oriental Poppies, gracefully cover the vacancies left by the earlier blooming perennials, and blossom incessantly until frost.

## ANNUALS VS. PERENNLALS AS EDGINGS

It is better always to use annuals for edging a bed if a bright finish is desired during a long season. (See [ 21 ]

## CONTINUOUS BLOOM IN AMERICA

Plate VI.) When such perennials as Armeria, Achillea tomentosa or Clove Pinks are grown in the front line, there is nothing left by mid-June but their evergreen foliage. If these plants should be alternated with strong, long-blooming annuals, such as Ageratum and Verbena, the latter would soon creep over their perennial friends, which, for lack of light and air, must turn sickly and will probably die. In a bed for continuous bloom, it is impossible to plant in effective alternation along the whole length of the edge all the perennials that would be required to represent the various periods until frost.

If, however, it is desired to diminish the quantity of annuals required for an edging, the following combination with perennials is suggested for one bed at least.

Plant the hardy, silvery, bushy Santolina incana every 24 inches, and between plant groups of Cottage Tulips.

Then plant in May, around the Tulips, a few Ageratum, white in some spaces, blue in others; or add to some of these spaces other all-summer blooming annuals, not much taller than the Ageratum.

Of the low growing perennials for an edging, For-get-me-nots, Viola cornuta, Campanula Carpatica, and blue Plumbago bloom the longest. Plumbago, with one or two of the others named, could be satisfactorily used without annuals when the garden is to bloom only in May, June, and September.

## WHERE TO PLANT

In planting for a long blooming season, crowding is more or less necessary. A careful staking and care to remove unnecessary foliage will prevent injury to a small plant in danger of being overshadowed by a large one. Let hidden stakes support the larger plants for the preservation of their symmetry, as well as for the life of the smaller neighbors.

## THE SCALLOPED EDGE

When a wall bed is sufficiently deep and long-not less than 12 by 25 feet-an effective finish to the front is produced by sowing Sweet Alyssum in scallops, using slightly taller annuals like Petunias to fill the scallops. See Plate VI and Chart X.

The scallops may measure about 2 to 3 feet in depth, and 3 to 5 feet across the top from point to point, which allows 5 to 8 scallops to a 25 -foot bed. There should be a space of from 4 to 6 inches between the edge of the bed and lower end of curve. This space can hold two lines of Sweet Alyssum, the lines increasing in the wider spaces. Within the curves may be placed Pansies in separate colors for early bloom, followed by such long blooming annuals as pink Petunia, dwarf yellow Calliopsis, fibrous Begonia, Verbena, Ageratum, Dianthus, or others of about the same height. It will take possibly twenty-five of such plants to fill a large curve, except in the case of Ver-

## CONTINUOUS BLOOM IN AMERICA

bena, Ageratum, and Petunia, of which but twelve may be required.

The scallops sometimes can be outlined with pink Candytuft or yellow Sanvitalia or blue Brachycome, set 6 inches apart.

Sown in the bed in April with Sweet Alyssum, Candytuft will die out by the time the plants within the curve are nearly full grown. Sanvitalia after a while will creep out to mix most effectively with Sweet Alyssum in a long bloom.

Sown in April, Sweet Alyssum will need to be cut back in August about half-way, in order to prolong its bloom until frost. Variety Little Gem is the best for this plan.

## a Garden of narrow beds, three and one-halp FEET WIDE

The illustration facing this page shows a small garden, which in spite of narrow beds is overflowing with continuous bloom from May 1 till frost. Tulips, a few May and June perennials, and several varieties of annuals flourish here, but on account of the narrow quarters, the gardener must be continuously vigilant to prevent the smothering of the smaller plants.

The first bloom brings the early Tulips, edging all the beds and alternating with Pansies just behind the box border, with three groups of these Tulips also in the centre line of each bed.


Continuous bloom in small beds
Crescent M:amor, Marrintown, N. J., Mra. Fucorge C. Friser




By couriesy of Miss ('urnclia L. Clarkson

Lupins and gas plants

## WHERE TO PLANT

No sooner have they gone than the Cottage Tulips appear on both sides of and close to the plants in the centre line of every bed. Tulips are later removed.

The centre lines contain Lupins, Delphinium belladonna, Lilies, Larkspur, and hardy Chrysanthemums* in alternation.

Running parallel with and close to the two Cottage Tulip lines are two lines of alternating annuals, i. e., Campanula medium, Snapdragon, and Zinnia.

Some Sweet William are crowded in, and with Pansies they are later discarded for Heliotrope, compact Petunias, Ageratum, Impatiens, $\dagger$ etc., which are carefully moved to their places with balled roots, or from pots.

The centre bed (7 feet diameter) of this garden is devoted mainly to annuals and bulbs. The planting is quite similar to plan on page 18. Intelligent, painstaking labor keeps this small garden blooming from spring frost until autumn frost. See Chart IX.

[^5]
## Chapter IV

## WHEN TO SOW

PERENNLALS
When depending on your own nursery for the first garden supply all but a few of the plants named in this chapter may be started from seeds, the earlier in in the season, the better bloom the next year. The most important plants to keep in stock afterward are: First, those which take longest to mature, and which may die out within five years; and, second, those which grow quickly, but which are more or less shortlived.

## Start Two Years Before Required

KEEP SOME IN STOCK
Pyrethrum hybrid.*
Columbine.
Salvia azurea, var. Pitcheri. Monkshood Wilsoni. Anemone Japonica.

These are likely to die within five years, excepting Poppy, Platycodon, and Anemone Jap.

All self-sow quite freely excepting Platycodon, Anemone, and Salvia azurea.

* The perennials most quickly killed by overcrowding are Pyrethrum hybrid, Lily candidum, and Shasta Daisy. In a dry climate the Lupin is better for some shading from the neighboring plants, but will suffer if deprived of all air, dew, and water, as when the heavy foliage of a near-hy plant covers it over completely.


## WHEN TO SOW

## Start Twelve Months Before Required

SHORTER-LIVED-KEEP IN STOCK

Lupin polyphyllus. Lupin polyphyllus Moerheimi. Delphinium belladonna. Gaillardia. Foxglove. Hollyhock. Sweet William. Agrostemma cor.

Anchusa Italica, Opal.
Delphinium Chinense. Campanula persicifolia. Sweet Rocket. (Enothera Youngi. Shasta Daisy.

Those on left column are the shorter-lived. All self-sow freely except Enothera, Campanula persicifolia, and Delphinium Chinense. To bloom well twelve months after sowing Lupins need the best soil and watering.

## Start Twelve Months Before Required <br> NO RESERVE STOCK NECESSARY

Rarely die out-start enough seeds for the first garden planting,* if plants are not bought of the nurseryman.
Achillea "Pearl." Helenium, Riverton Gem.
Lychnis Chalcedonica, white. Helenium, Riverton Beauty. Coreopsis lanceolata. Valerian officinalis, alba.
Statice latifolia requires two Rudbeckia purpurea. years to grow. Gypsophila paniculata.

Seeds Not Obtainable-Buy Plants
NO RESERVE STOCK NECESSARY
If only a few of each can be afforded, allow them two or three years to spread by root in nursery in order to secure quantity desired for garden; or else for immediate use purchase total number of plants needed for each and every clump.*

* Under "What to Plant" find the number of separate (nursery) plants required to make one clump sufficiently large to take a place in the garden.


## CONTINUOUS BLOOM IN AMERICA

Irises-German. Eupatorium coelestinum.
Irises-Japan.
Lemon Lily-Hemerocallis.
Ranunculus acris f. pl.
Phlox-late.
Phlox-Miss Lingard.

Veronica, long subsess.
Sedum spectabile.
Dictamnus-Gas Plant, nonspreader.
Asters-Tall late August. Peonies.

Under congenial conditions-sunshine, rich soil, and watering-all plants named, when sown in April and May, will give satisfaction the following year, excepting those where otherwise noted. Sow them in spring, rather than in summer, whenever possible. If they must be sown in summer keep the seedlings moist, also shaded for at least half the day until midSeptember.

Instead of requiring it to live through two years, Sweet William is so easily grown that it is best to give it the same treatment as the Campanula medium, i.e., same date of sowing, May 1, in nursery, and discard it after its first bloom, using its space after bloom for later annuals.

Of the plants named above, Dictamnus is the slowest growing and, therefore, the one variety above all others to be purchased first, in as large plants as possible, and planted as soon as possible in a permanent place. It must be established several years before its bloom is satisfactory; it is better therefore never to disturb it.

## WHEN TO SOW

## HARDY ANNUALS AND BIENNLALS

Hardy annuals may be divided into three classes or degrees of hardiness.

## The First Class

The hardiest of the best hardy annuals are Bluets* (Corn-flower), Silene armeria, Shirley Poppies and Larkspur,* with the perennial Forget-me-not, var. palustris semperflorens, Anthemis, and Feverfew, treated as hardy annuals.

Fall-Sown.-When sown the previous year in August, these plants, blooming the following May, June, and July, greatly assist in the scheme of continuous bloom. In most climates they survive the winter well in the open ground, needing only a sprinkling of leaves or salt-hay to keep them warm.

Self-sown in summer and usually germinating in August, they are by nature May and June bloomers, which, with Campanula medium (biennial Canterbury Bell), are quite indispensable to this period-the Larkspurs lasting through July, or later.

Feverfew and Forget-me-not palustris flower all summer, but, like Viola cornuta, bloom so weakly in the latter half of the summer that for this period at least some gardeners prefer not to depend on them alone.

[^6]
## CONTINUOUS BLOOM IN AMERICA

Consequently they sow the spreading variety of Sweet Alyssum close to the line of Forget-me-nots, which is later partly covered by the creeping white sprays that mingle well with the scantier blossoms of sky-blue.

After the first splendid bloom (July 1) of fall-sown Feverfew, some of us choose to replace it with the same plants, spring-sown; either by transplanting the latter from the open spring nursery sometime in June, or else by sowing seeds of Feverfew in April near their older brothers in the garden. Spring-sown outdoors, it blooms by August.

All the annuals of the hardiest class may be sown also in the spring.

Shirley Poppies sown April 1 in the garden, bloom in late June, and are not transplantable.

## The Second Class

Sown August.--In this class are the Pansies, English Daisies, Snapdragon, Dianthus, and the biennial Forget-me-not, var. alpestris Victoria, etc.

For early bloom they also should be sown in August of one year to bloom the next May and June, and as a rule they are only safely wintered in a cold-frame (glass or slat top) from New York City northward. Occasionally, where they have a well protected position with covering, they may survive a cold winter in the open, but, except Dianthus, the risk is not worth taking.

## WHEN TO SOW

Spring-Sown.-This class may be sown as well in spring in the open ground when early bloom is not required, Forget-me-nots and English Daisies excepted, or else in the early spring under glass in order to hasten the bloom.

The beautiful June Campanula medium, biennial, (Canterbury Bell) for best results should be started in the open nursery in May to blossom a year later for three or four weeks, and not again. It is about as hardy as the Pansy.

The garden cannot have too many plants of Snapdragon, Larkspur, Campanula medium, and Feverfew. They are easily reared, occupy but a small space, and if sown the preceding year, will finish blooming the next season by the time the spring-sown plants are ready to replace them. They can be replaced by their kind (except Campanula) or others. It is only when Snapdragon is forced to begin full flowering in early June that it requires to be replaced in August by Snapdragon from a later sowing.

## The Gardener's Guide in Brief <br> summary of foregoing pages <br> First-Class Hardy Annuals

August-sown
(the 25th).
Open nursery.

Bluets (Corn-flower).
Silene armeria.
Shirley Poppies, sow in garden only. Larkspurs.
Anthemis tinctoria Kelwayi, yellow. [ 31 ]

## CONTINUOUS BLOOM IN AMERICA

Anthemis tinctoria, creamy. Feverfew, double white.
Forget-me-not, var. palustris semperflorens (sow August 1).

These hardiest annuals, except Forget-me-nots, may be sown also in spring in the open to bloom later in the season -August, and Poppies bloom earlier.

## Second-Class Hardy Annuals

August-sown. Pansies.*
English Daisies.
Snapdragon.
Dianthus, Pinks.
Forget-me-not, var. alpestris hybrid.
These also may be sown in the open in spring to bloom later the same year, excepting Forget-me-not and English Daisy.

Of course, the early bloom may be had from most of these plants by sowing them in February in hotbed or greenhouse; but why take up so much valuable greenhouse or hotbed space, unless for Snapdragon, if it is possible to start them in the open nursery the preceding year, to bring bloom in May and June?

Third-Class Hardy Annuals
Spring-Sown.-Sweet Alyssum and Candytuft, the earliest to germinate, Eschscholtzia, Calliopsis, Calen-

[^7]
## WHEN TO SOW

dula, Tagetes, Gaillardia, Nicotiana, Portulaca, Nasturtium, Lupin, Lavatera, Zinnia, Globe Amaranth, Sunflower, Early Cosmos, Marigold, and Petunia belong to the third and still less hardy class of hardy annuals, and yet some of them are the first to bloom from seeds sown early in the open. While unable to withstand the winter cold even in a cold-frame, most of them will germinate in spring without a glass covering while the air is still chilly.

Frame space is not required for Sweet Alyssum, Calliopsis, Tagetes, Salvia farinacea, Gaillardia, Nicotiana, Portulaca, Eschscholtzia, Calendula, Candytuft, Lupin, Nasturtium, Lavatera, and the last six are not easily transplanted, but when frames are available, use them for forcing the earlier bloom of the following: Zinnia, Petunia, Cosmos, Globe Amaranth, Sunflower, Marigold.

This advice applies especially to the use of the coldframe near New York City east and west and northward to Poughkeepsie. Within this area there are doubtless some very sheltered open places where Zinnia at least might make almost as early a start and blossom almost as soon as in a frame, providing, however, that an unusual late frost does not affect the growth. The gardener will soon learn what to expect of his annuals in his own garden.

## CONTINUOUS BLOOM IN AMERICA

## FOR BLOOM TILL FROST

## The Gardener's Guide in Briee SUMMARY OF PRECEDING PAGE <br> Third-Class Hardy Annuals <br> Spring-sown Zinnia. First Division. <br> April 1. Globe Amaranth. (First bloom, late June.)

Under glass, Sunflower (miniature).
if possible. Cosmos, early.
Marigold, African.
Petunia.
April 15. $\quad$ * Lupin (blooms 6 weeks). Second Division.
Open bed * Candytuft " " " (First bloom, June.)
preferably. Sweet Alyssum.
Calliopsis.

* Calendula.

Tagetes.
Salvia farinacea (July).
May 1. Gaillardia. Third Division.
Open beds. Portulaca. (First bloom, July.)
Nicotiana.

* Nasturtium.
* Eschscholtzia.
* Lavatera (blooms 4 weeks).

The plan for continuous bloom demands that these plants of the first division be started under glass by April 1. Those in the second and third division are better sown in the open. Those marked with a star should not be transplanted if avoidable.

Portulaca, Petunia, and Nicotiana do not germinate in the open ground until nearly the first of June.


Continuous bloom of annuals bordering brick path
"Cherrycroft"


The scallop edge
"Cherrycroft," Morristown, N. J., Dudley Olcott, Esq.

## WHEN TO SOW

## THE TENDER ANNUALS

Spring-Sown.-The tender annuals belong to a class of annuals that cannot survive the slightest touch of frost. They may be sown in the open (most of them) or else all may be planted out, only when danger of frost is past. However, when certain varieties are required to bloom in June, sow them in hotbed, win-dow-box, or greenhouse, from February 15 to March 15. The tender annuals advised are: Verbena, Begonia, Ageratum, Vinca, Lobelia, Salpiglossis, Torenia, Cockscomb, Aster, Scabiosa, Painted Daisy, Balsam, Cleome, Heliotrope, Impatiens.

Heliotrope and tuberous Begonias are best raised by cuttings in greenhouse heat. Choice Verbenas are sometimes propagated by cuttings. Lacking greenhouse or hotbed for starting them very early, the above-named may be purchased in plants, or Ageratum, Salpiglossis, Torenia, Vinca, and Verbena could be started like Zinnias in the cold-frame April 1, which would be better than still later sowing in the open ground, as they are slow growing.

Cockscomb, Aster, Scabiosa, Painted Daisy, Balsam, and Cleome are not required until later, so they may be sown in the open in May, and transplanted, if necessary, excepting Cleome and Painted Daisy, which do not transplant well in some places.

In spite of their beauty, it might not be feasible to ad-

## CONTINUOUS BLOOM IN AMERICA

mit into a small garden of continuous bloom such shortlived annuals as Schizanthus, Godetia, and Clarkia. But when beds are very large they may be entered as additional luxuries in small groups alternating with plants of one or two other periods of bloom. For instance, with Larkspur and Celosia spicata, or with Larkspur and Gladioli, the latter planted July 1; or with September hardy Chrysanthemums and groups of Scabiosa. These are all slim plants, and may be set about 6 inches apart, except Chrysanthemums, 10 inches apart.

## WHEN TO SOW

## FOR BLOOM TILL FROST

## The Gardener’s Gutide in Brief

SUMMARY OF PRECEDING PAGES
Tender Annuals
Spring-sown. Lobelia. First Division.

March 1 to 15. Begonia, fibrous.
Hotbed or green- Begonia, tub., cuttings.
house. Heliotrope, cuttings. Impatiens, light pink.
Ageratum.
Vinca.
Salpiglossis.
Torenia.
Verbena.

| April 1, cold-frame, | Cockscomb. |
| :---: | :---: |
| or | Asters. |
| May 15, open bed. | Scabiosa. |
|  | Salsam. |
|  | Cleome. |
|  |  |
|  | Painted Daisy. |

In order to take their places promptly in the scheme for continuous bloom, those in the first division must be started early under glass. If there is sufficient frame space, those in the second division may be started in the cold-frame, except Cleome and Painted Daisy, which are better for being sown where they are to grow.

## CONTINUOUS BLOOM IN AMERICA

In this scheme for continuous bloom, the sowing dates given provide that late June shall be the week when many of the spring-sown annuals shall commence to furnish a fair bloom. Lupin, Lavatera, English Daisy, Silene, Poppy, Candytuft, Asters, Balsam, Salpiglossis, and Cleome are the only annuals named in this chapter that do not blossom for several months in congenial climate.

In the author's garden the mid-June sowing of at least some of the annuals-Zinnia, Larkspur, Aster, and feathered Celosia-is unsatisfactory, as the plants not having made a certain start before June 15 are more or less stunted for the rest of the season. This may not be the case in a cool and moist climate.

## Chapter V

## WHEN TO PLANT

In one way or another, a garden may be commenced at any season. It is never too late to make some kind of a start for the future. Spring, of course, brings the most opportunity for work, and it is the best time for sowing perennials and Campanula medium for the next year.

When desiring in summer to begin a new garden, one can devote first efforts to laying out the beds after consulting Chapter III on bed space: also a seed-bed or nursery may be prepared with the aid of suggestions given in Chapter II, in order to stock the future garden at a lesser expense than when plants are purchased. Important work can be accomplished in August, for then is the very best time for planting the Poppy, Lily candidum, Peony, and German Iris, and for sowing certain hardy annuals as explained on page 29. With perennial seeds, the earlier sown the better for plants that should give satisfactory bloom the next year.

## HARDY PERENNIALS

May blooming hardy perennials should be moved,
if possible, in the autumn; the earlier the better in

## CONTINUOUS BLOOM IN AMERICA

order to become rooted before frost. When the early flowering plants are moved in the spring, it means that the first season's bloom will be more or less affected by the disturbance of the roots. Perennial Lupins seem to be an exception to this rule.

The perennials beginning to bloom by mid-June or later may be set out either in the early spring or in the fall not later than October 15. This is a safe rule, although when occasion requires it, the experienced gardener often takes his chances, and successfully, with later fall planting. Exceptions to the rule for spring and fall planting were just mentioned in connection with Lily, Poppy, etc., but, of course, these plants may be moved at other times as well.

## THE HARDY ANNUALS

First Class
The August-sown hardy annuals of the first classSilene, Bluets, Feverfew, Larkspur, Forget-me-not (h. p.), and Anthemis-wintered in the open ground or frame, need not to be disturbed until transplanted in early April to the garden-bed, or as soon as the ground can be dug over and enriched, allowing a day for the settling of the soil.

Where the winter climate is mild, it is also possible to transplant them all from the nursery to the garden by October 1 (not later for annuals), lest the cold injure those weakened by moving. As a result, they [ 40 ]

## WHEN TO PLANT

might blossom a week or two earlier than when disturbed in the spring. However, transplanting them to the garden as early as October 1 is usually made impossible by the fact that the beds are filled with flowering plants at this period.

At transplanting time a few plants of each variety may be left to bloom in the open nursery, where they will resow themselves for next year's bloom. In this case, if possible, keep at a distance from one another the different colors of Larkspur, so that their seeds will not be as likely to mix. The gardener, however, may prefer to sow annually his favorite colors, as self-sown seeds cannot be relied upon to come true.

The hardy annuals, Bluets, Silene, and Larkspur, when sown in the spring under glass or in the open nursery, may be moved when 2 to 4 inches high. They don't transplant well if taller. For the purpose of replacing the fall-sown Larkspur and Feverfew, these same varieties sown in spring can be kept in pots, if convenient, to make easier the late transplanting.

Shirley Poppies must not be transplanted at any time.

## Second Class

The hardy annuals of the second class, Pansies, English Daisies, Dianthus Pinks, Snapdragon, Forget-me-not alpestris, when sown in August should be transplanted by mid-September to 5 to 6 inches apart in [ 41 ]

## CONTINUOUS BLOOM IN AMERICA

the cold-frame, or wherever they are to winter. In April they may be moved to the garden. If Dianthus and Snapdragon and Forget-me-not are moved in early April, it is well to supply them for a while with a light protection of leaves or hay in case of a severe spring frost. Dianthus is the hardiest of this class, and will sometimes survive winter in the open, if not moved too late in the fall.

Campanula medium, when large enough, should be transplanted in the open nursery 6 inches apart, and again transplanted to the cold-frame in September, set 8 or 9 inches apart. By April 15 it can be safely moved to the garden.

## Third Class

Spring-Planted Only.-The third class of hardy annuals, those sown only in spring, Zinnia, etc., although classed as hardy, if started early under glass, are on this account more tender than when sown in the open. They should, therefore, not be set out before May 20, when severe frost no longer threatens. If they have been sown in the open, they can be transplanted whenever convenient.

## TENDER ANNUALS

The tender annuals sown under glass should not be moved to the garden until after all possibility of frost, which is the last of May near New York.
All paths curnig
East Hawplon. L. I., Ruger Donoho, Esq.

## WHEN TO PLANT

## TRANSPLANTING

Most annuals will invariably live after being transplanted if properly as well as sufficiently watered.

Enough cannot be said toward urging the gardener first to puddle the holes when setting out the strongerrooted plants. The surface of the ground should also be watered after the hole is closed over the roots.

With the small, frail seedlings like Petunia a different sort of watering is necessary. First, soak thoroughly the surface of the soil, where the small plants are to grow; wait five minutes for the water to absorb, and then with a finger or stick make holes the depth of the rootlets for each plant, gently pressing in the damp soil over the roots. Don't sprinkle the newly set seedlings for twenty-four hours, when they will be strong enough to stand erect under a light spraying.

When setting out small plants, like Cosmos, they may need to be supported by stakes to be kept erect. Instead of tying them at first, an operation which takes more time, it is often better to protect and steady each one with three twigs until the stem grows strong; by this means, too, they are kept safe from trespassing cat, dog, or heedless human. When they shall have grown larger they can be tied to a stronger stake, if necessary. The dead-wood removed from shrubbery is very useful for this purpose.

In the spring just before planting time spread a [ 43 ]

## CONTINUOUS BLOOM IN AMERICA

good layer of sheep's manure over the bed intended for annuals, and have the manure dug under only 2 inches deep and no more. It works down fast enough and most annuals are shallow-rooted. If the soil is not especially rich more sheep's manure and bone-meal can be added a little later in the season. Some of the finest gardens are never given any barnyard manure, which is more likely to bring weeds and pests.

## WINTERING OF PERENNIALS AND ANNUALS

All the hardy perennials in the open nursery and the garden need more or less covering during the winter months. If available, there is no better protection than salt-hay.

Fall-sown (August to September) Larkspur, Silene armeria, Bluets, Feverfew, Anthemis, and Forget-menot, var. palustris, winter just as well in the open as in a frame, except in an extremely cold climate.

Pansies, English Daisies, Snapdragon, and Dianthus sown in late August in the open nursery, are transplanted later to frames for the winter, at least near New York and northward, where risks are avoided.

Campanula medium sown in May or June in the open nursery to bloom the following year needs the same winter protection as the Pansy.

Where certain annuals must be wintered in cold frames, we should plan so that the frames contain none but the plants demanding such protection; then

## WHEN TO PLANT

in spring, just as soon as the frost is out of the ground, transplant them to the garden-beds, in order to allow for the use of the frame as a nursery for spring-sown annuals.

Plants to be protected in cold-frames may have either the glass sash or else a square top made of laths, with a 1 -inch space between each lath. The latter is sufficient protection for Pansies, English Daisies, Snapdragon, etc., except in a very cold climate. Some fine manure is always worked in around the plants, not over them, and a thin layer of hay or leaves covers them lightly. The laths keep out the heavy snow and the full sunshine, supplying a more even temperature than when under glass. The glass cover needs to be lifted on mild winter days to prevent overheating, but if it is not lowered at night, damage may result. The wooden top needs no attention; it should only be removed when the plants are ready for the spring growth.

In the northern climate, where snow forms a winter covering, it is considered to be about the safest sort of protection. Biennial Canterbury Bells are sometimes wintered in the open with manure above the roots, but not covering the plant itself, leaving the crown of the plant to be protected by brush or boughs from the heavy pressure of snow.

## Chapter VI

## WHEN THEY BLOOM

## the periods

In the region of New York City at least, the garden bloom may be divided into eight flowering periods, beginning about May 1.

If, however, the beds are to be filled with color, continuously during the long season, which ends only with frost, then usually space must be saved somewhere by the omission of at least one of these periods.

Accordingly, the opening time in some gardens is generally the second period, May 22, when German Iris appears, and the late Tulips are still blooming; though it is often possible to include the first period by the use of a profusion of early Tulips, which occupy no space when their flowers are gone.

The other plants that have ceased to bloom when the German Iris begins, belong to the first period, and as a rule are deemed eligible only for the spring garden set apart by itself. Ordinarily this plan is preferable, as early May flowers are mostly low growing and small-flowered, necessitating too much of each variety before the color effect is obtained, and therefore making

## WHEN THEY BLOOM

them impracticable for the garden crowded with plants of the other periods.

However, early spring perennials may have their places in the main garden when the owner is to be at home in May, and absent during some later periods. The flowers that will bloom only during his absence can then be omitted, allowing the use of that space for the earliest bloomers.

In a colder climate, where plants make a later start, the blooming periods arrive in closer succession, the earlier periods almost blending in one period; the frost comes earlier, the season is shorter; therefore in the North planting for continuous bloom is not as complicated a task; there are fewer periods for which to provide and a lesser number of varieties of plants required.

> First Period *

The most useful plants for early spring are the following:

May 1-22

Doronicum.
Early Tulips. Phlox divaricata. Phlox subulata. Bleeding-Heart. Forget-me-not.

Hyacinths.
Arabis.
Mertensia Vir.
Pansies.
English Daisy.
Hardy Candytuft.
Primroses-Primulas. oughly considered in a later chapter on "Spring Gardens."

## CONTINUOUS BLOOM IN AMERICA

## Second Period

In this season of late May, the Pansies, English Daisies, Forget-me-nots are already edging the beds, and the Darwin and Cottage Tulips of every rainbow tint are adding wonderful colors. The garden is soon radiant with

## May 22

Valerian officinalis.
German Iris.
Lemon Lily.
Oriental Poppy.
Lupin polyphyllus.
Silene armeria.
Bluets (Corn-flower).

Ranunculus acris fl. pl. Columbine, tall vars. Gas Plant-Fraxinella. Pyrethrum hybrid. Salvia pratensis. Campanula persicifolia. Peony.

Sweet Rocket.

## Third Period

When some of the foregoing have passed and others are lingering, i. e., Pyrethrum, Peony, Lupin poly., Columbine, Salvia, Campanula persic., Silene, and Bluets, then arrive the

June 5

Sweet William.
Lupin poly. Moerheimi.

Anchusa Ital., Opal.
Enothera Youngi. Campanula medium.

## Fourth Period

This week is the richest in hardy bloom, those of the last period remaining a while with the newly arrived.
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From photographs by The Morris Studio
Curving grass paths
Meadow Club, Southampton, L. I.

## WHEN THEY BLOOM

June 20

Delphinium (all). Feverfew. Coreopsis. Foxglove. Lychnis Chal.

Candytuft.
Lily candidum.
Gaillardia.
Larkspur.

Agrostemma cor. Anthemis. Lupin, annual. Sweet Alyssum.

Fifth Period
Indispensable at this period are the Anthemis, Feverfew, and Larkspur, of which one variety at least should appear profusely in every bed. Now or possibly a little earlier the following perennials may be expected:

July 1*

Hollyhocks.
Shasta Daisy.

Japanese Tris. Achillea Pearl. Phlox Lingard. Platycodon. Gladioli-Planted May 1.
Up to this time the bloom of the early spring-sown annuals has been but a weak suggestion of the color to come. The time for anticipating the full glory of the annual family (spring-sown) varies from July 1 to August 1, depending on climate, germinating time and place. Sweet Alyssum and Candytuft, sown April 15, reach their perfection by June 20.

Sixth Period
Unless spring-sown annuals have been early pushed, and unless Larkspurs are plentiful, the mid-July bloom may wane at this time, until the late Phloxes and a few other perennials shall appear toward the end of the month.

[^8]
## CONTINUOUS BLOOM IN AMERICA

July 20

Phlox.
Veronica, long subsess.
Dahlia, cactus, etc.
Eryngium amethystinum. Statice latifolia.

Rudbeckia purpurea.
Gypsophila paniculata. Echinops sphæroceph. Cannas, pink and white. All the annuals.

## Seventh Period

Late August has a variety of perennials that are especially free-flowering, giving unusual color to this period.

August 25
Asters, hardy. Helenium, Riverton Gem. Pyrethrum uliginosum. Helenium, Riverton Beauty. Sedum spectabile. Anemone Japonica.
Salvia azurea and S. Pitcheri. Eupatorium coelestinum.
Eighth Period
September 15
Monkshood Wilsoni. Chrysanthemum (Sept. var.). Gladioli, planted July. Long-blooming annuals continued.

In October the Chrysanthemums are the only worthwhile perennials. The indefatigable annuals, such as Zinnias, Petunias, Marigolds, Verbenas, Ageratum, etc., are wearing a rusty appearance, making one feel that after all frost is not an unwelcome visitor this month. His blight saves us from brooding too long over a tired garden, when it is more important to be at work cleaning up and preparing for another year.

## Chapter VII

## WHAT TO PLANT-PERENNIALS

Single star indicates desirable plants not appearing in the charts at the end of the valume. Double star indicates a uscful plant for separate spring garden.

HARDY PERENNIALS
In planning a garden, read carefully to become familiar with names and habits of these plants.

MONTH HEIGHT

## White

 wort. A rapid spreader. Yearly the outer shootsneed to be removed to keep the clump within its limited square. In the third year, lift the clump and renourish the soil. Transplant early in the spring. Thrives in any good soil. Needs staking. Use only in very large beds, preferring Phlox Lingard instead for smaller beds, as the latter occupies less space and is easier to handle.

Aconitum. See Monkshood.

Garnet
White

Agrostemma, var. coronaria (Lychnis coronaria): Dusty Miller, Rose Campion, Mullein Pink. Woolly,

July-Sept. $2 \frac{1}{2} \mathrm{ft}$. silvery foliage; occupies but little space. Keep stock on hand from self-sown seedlings. Prefers sun, and soil not too heavy. Three or four plants 4 inches [51]

## CONTINUOUS BLOOM IN AMERICA

COLOR
apart to make a clump in small bed. Use plentifully, especially the white variety. Blooms all summer.

Blue Anchusa Italica, vars. Dropmore and Opal: Sea June Bugloss. The Opal is the lightest blue and most ${ }^{4-5} \mathrm{ft}$. beautiful of all. Plant in groups of two or three plants 8 inches apart. Self-sown seedlings may be removed to nursery to develop and returned to garden two years later. Succeeds in sun, any rich loam. Part of its coarse lower foliage may be removed when crowding other plants. It is best to move it in spring.

White
Pink waxlike plants. Var. Whirlwind is semidouble and larger; also other varieties. Thrives in any rich soil, not too heavy. Increases by root and grows in same position for years if liberally fed. In cold climate needs a winter covering of 3 inches. Use at least six small plants to make a clump. Transplant only in spring.

Yellow Creamy

Anthemis tinctoria, var. Kelwayi: Yellow Mar- July 1 guerite; var. alba (catalogue), cream-white. Bushy plant. Grows in any soil. Seeds self-sown in abundance. Sun or partial shade. Rarely requires winter covering. Self-sown seedlings found in September make good plants next season. Treat as a hardy annual; sow in August or September, and discard after first season's bloom. Stake when a foot high.

## PERENNIALS

Aquilegia. See Columbine. a mat. Better use it in separate spring garden. Sun or semishade. Prop. by seed, preferably by cuttings or division. Rapid spreader. Twelve small plants to make a clump or mat 1 foot square.

Blue Aster Novae Anglice: New England Aster, Mich- Aug.-Sept. aelmas Daisy, or Starwort. Choose varieties blooming late August to September and 4 feet and over. Use plenty of White Queen and richest shades of blue, purple, and pink. Among the best are Novce Anglice, purple; Mrs. F. W. Raynor, purple; Nove Anglio rose, also rubra; William Bowman, rose; Lil Fardell, rose. In ordering from a nursery, one plant is so small that six at least should be ordered to make one clump, planted about 3 inches apart. Thrives in any soil; spreads rapidly by root. Needs staking early. Prop. by seed or division.

Bachelor's-Button. See Ranunculus.
Bellflower, Japanese. See Platycodon.
Blanket-Flower. See Gaillardia.
Bluebells. See Mertensia.
White
Campanula medium, also C. calycanthema: Canter-
June 15
Blue
Pink bury Bell. Biennial. Single and double. Thrives in 2-3 ft. rich soil. Var. calycanthema is cup-and-saucer type. [ 53 ] weeks. Plant them generously over the garden.

White Blue

Campanula persicifolia: Peach Bell. Tufted foli- June 1 age at base of long stems. Plant rather close together, four to six in a group, and use freely. Increases by root. Prop. by seed or root. Needs sun and light soil.

Campion, Rose. See Agrostemma coronaria.
** Candytuft: Iberis sempervirens. Evergreen foli- May 15 age. Six small plants 4 inches apart to make a clump or mat. Rapid spreader.

Canna. The new white, also pink Cannas should July-Sept.
Pink White be used moderately in a large garden. Nothing is more effective. Place at ends of broad, long bed, near centre line.

Canterbury Bells. See Campanula medium.
Pink
Chrysanthemum, var. Aster or large-flowering Pompon. For the garden of continuous bloom choose only Sept. 15 those blooming by mid-September. Certain nurseries offer these large-flowered earlier bloomers in beautiful shades of rose, yellow, and white. Dislike very heavy soil. In some cold gardens they do not winter well, in which case give them cold-frame protection, and move with roots well "balled." Always give light covering, hay preferably; they will not stand heavy covering. Most of the hardy Chrysanthemums, when

## PERENNIALS

growing close to a south wall, and occasionally lifted for renourishment of the soil, will generally live for years, at least in New Jersey and southward. To make a good clump, set three small plants (shoots) 8 inches apart. When a foot high, pinch back to induce branching. Tobacco dust is the best treatment when black aphids attack them. Prop. by division or cuttings.

Chrysanthemum coccineum. See Pyrethrum, hybrid.

* Chrysanthemum uliginosum. See Pyrethrum uliginosum.

Chrysanthemum max. See Shasta Daisy.

White

Columbine: Aquilegia. Use the taller varieties. Prefers light rich, deep, well-drained soil, and thrives May-June $2-3 \mathrm{ft}$. in sun or partial shade. When allowed to self-sow, the seedlings are abundant. Keep plenty of the strongest of these young plants in best colors for nursery stock, as Columbine is not long-lived. Some gardeners prefer to use more Lupins and hybrid Pyrethrum than Columbine, because the latter is less effective in the garden color scheme. Prevent large annuals from smothering the Columbine. Don't plant it in garden-bed until two years old. "To have the most vigorous and beautiful plants the two varieties -mixed Longspurs and var. vulgaris-should grow near together: then select the strongest of the seedlings [55]

## CONTINUOUS BLOOM IN AMERICA

found about them, discarding all inferior plants and colors. The white vulgaris parent will always have white seedlings, no matter what form or color the other parent." If they are to be transplanted in early spring keep plenty of earth about the root. Fall planting of Columbine is preferable.

Coneflower. See Rudbeckia purpurea.
Conoclinum coelestinum. See Eupatorium coelestinum.
Yellow
Coreopsis lanceolata, var. grandiflora: Tickseed. June-Oct Very hardy and increases rapidly by root and by $2 \frac{1}{2} \mathrm{ft}$. self-sowing. Likes almost any good soil not too heavy. Cut fading flowers and it will bloom till frost. Keep it in front of plants the height of Zinnia.

Dahlia: Plant but one or two tubers. Hollow July-Oct. ground around stalk to hold water, water frequently. Plant after mid-May 3 feet apart.

Daisy, Giant. See Pyrethrum uliginosum.
Daisy, Shasta. See Shasta Daisy.

Blue White

Delphinium Chinense: Chinese Larkspur. Light and dark blue, also white. Fine feathery foliage. If sown in May or June will make strong plants the following year. Blossoms three times during summer. Plant near front of bed. Feed once during summer to help later blooms. Sun and rich soil.
Blue Delphinium elatum: Bee Larkspur, hardy Larkspur, tallest variety.

Blue Delphinium formosum, var. coelestinum, also bella- 4 ft . donna: Oriental Larkspur. Deep to light blue, not so tall. Also new white variety.
White Delphinium grandiflorum, var. album, 2 to 3 feet. $2-3 \mathrm{ft}$. Delphiniums need well-drained, rich soil, not too clayey. Keep manure from contact with roots and sprinkle coal ashes around base of stalk in November to protect it from insect enemies. Plant in garden in second year. Cut back to ground each fading flower-stalk and apply liquid sheep's manure in midsummer to insure strength for later blooms. If the large Delphiniums are allowed to flower three times during the season without ample nourishment to sustain vigor, they may die out that fall. When plant begins to deteriorate, divide it as early as possible in spring.

Dictamnus. See Gas Plant.
Digitalis. See Foxglove.
Dusty Miller. See Agrostemma.
Blue

* Echinops sphcrocephalus: Round Head Globe July, early Thistle. Tallest variety, two or three small plants 6 ft . together. Use only in large garden for additional variety. Prop. by dividing.

Blue

* Eryngium amethystium: Sea Holly. Three small July plants, 6 inches apart, to make a clump. Use it only 4 ft . in large beds.

Eupatorium colestinum (Conoclinum colestinum): in the spring, when it is difficult to detect life in roots and for this reason it is often discarded for dead. Keep permanent stake above it. Spreads rapidly by root and is long-lived. Protect slightly in winter. Six to ten plants to a clump. Prop. by cuttings and suckers.

Evening Primrose. See Enothera.
False Dragon's-Head. See Physostegia.
White
Feverfew, Double Camomile: Matricaria. Use June-Sept. double white variety only. Sows itself freely and these seedlings are hardy and transplantable at any time, sun or semi-shade. Bushy plant. Cut back fading flowers to force later moderate bloom. It is classed with hardy perennials, but not to be depended upon for second-year bloom. Better treat it as a hardy annual and sow in fall to bloom late June. For best August to September blossom, sow seeds again in spring instead of relying on the later blooms of the older fall-sown plant which will have made its best showing in June and July.
Blue Forget-me-not: Myosotis palustris, var. semper- May-June florens. Sow August for bloom the next year. After 10 in. a summer's bloom lift the old plants and replace them, after renourishing soil, with the numerous seedlings to

## PERENNIALS

MONTH
coLor
be found in the vicinity. This suggestion is made in connection with the plants forming an edging to a bed which must be kept neat and straight.

Pink Foxglove: Digitalis, hybrid. White and pink pre- June ferred. Any rich soil. Sun or partial shade. Keep in ${ }^{3-5}$ ft. nursery the plants less than 6 inches in diameter. The self-sown plant is the hardiest. In a severe climate winter in cold-frame. Will not tolerate heavy winter covering over the top. Be prepared to replace it after its third year. If not allowed to go to seed side shoots will appear for next year. Cut fading flowers for a second bloom. Prop. by seed.

Fraxinella. See Gas Plant.
Yellow
Gaillardia grandiffora: Blanket-Flower. Easily grown, but sometimes winter-killed. Give heavy 2 ft . covering. Set six plants 4 to 5 inches apart, to form one group. Grows in any soil, in sun. Keep stock in nursery.
Garden Hellotrope. See Valerian.

White Pink

Gas Plant: Dictamnus fraxinella. Use more of May, late the white variety. One of the most desirable of May's 3-4 ft. hardy plants. Give rich, deep soil and sun. May outlive two or three generations if left undisturbed. Leaves and flowers have peculiar pungent odor when crushed. Use one plant in small space. In a large bed two or three plants 1 foot apart. Slow growing. Does

## CONTINUOUS BLOOM IN AMERICA

not blossom well until second or third year after planting. Improves with age, and when well-developed forms a large bushy plant full of bloom. When there are a sufficient number of strong Gas Plants in the garden fewer Lupins will be needed. The latter are beautiful, but the plants are comparatively shortlived, requiring to be oftener replaced.

White
*Gypsophila paniculata: Baby's Breath. Bushy. July Place next to a spreading plant so that after its bloom ${ }^{2} \mathrm{ft}$. the space may be partly covered. A line of Eupatorium coelestinum encircling it, not too close, conceals well the empty space, when Gypsophila dies down.

Yellow * Helenium: Sneezeweed, var. Riverton Gem. Gold Aug. late tinged with reddish streaks. Var. Riverton Beauty, ${ }^{6 \mathrm{ft} \text {. }}$ yellow with dark cone. Use six or seven nursery plants, set close together for one group. Stake early.

Yellow

* Hemerocallis, var. flava: Sweet-scented Lemon May-June Lily. Needs deep, light, rich soil. Spreads rapidly. Six plants to start a group.

Hesperis matronalis: See Rocket.
White
Hollyhock: Althea rosea. Single or double, as July preferred. Needs deep, rich soil and sun. Transplant $5-7 \mathrm{ft}$. in spring only. Give treatment of Bordeaux Mixture early if brown spots appear. Needs heavy winter covering where climate is severe. Requires staking. Cut stalks down to ground when finished blooming.

## PERENNLALS

color
When lifting it dig deep for long tap-roots. Self-sown plants that have not been disturbed make the finest specimens.

Iberis sempervirens. See Hardy Candytuft.
Various Iris Germanica: Fleur-de-lis. Six small plants to May 20 start a clump. Enrich bed with layers of manure, avoiding contact of roots with manure. When it must be moved, July or August is the best time, in order to insure good bloom the next year. However, crowded beds may prevent transplanting until after frost. Prop. by division.

Various Iris, Japanese: Iris Kampferi. Use six small plants July 1 to start a clump. Water freely. Enrich well, but keep manure from contact with roots of all Irises. Occasionally needs lifting and dividing. Starting plants from seeds is not advisable, as it takes so long.

Larkspur, Hardy. See Delphinium.
Pink *Liatris, var. pycnostachya: Blazing Star. Purplish July pink spikes. This plant is not always popular on ac- 5 ft . count of its peculiar tone of pink.

White
Gold

* Lilium auratum: Gold-banded or Japan Lily. July, late White with gold bands and purplish spots. The finest 4 ft . of the lilies, but lives only about three years. May be planted in spring or late fall. Prop. by offsets or scales. Plant in sand with base of bulb 8 inches below surface.
[ 61 ]


## CONTINUOUS BLOOM IN AMERICA

White
Liliom candidum: Madonna Lily, Annunciation June, late Lily. Should be planted between August 1 and 4-6 ft. September 1, preferably August 1. Will multiply in rich, deep, well-drained soil. Cannot survive much shading from surrounding plants. Often does its best in rooty soil. Set this bulb with only 2 inches of soil above its crown. Surround bulb with thin layer of sand.

Pink and White
*Lilium speciosum, vars. rubrum and Melpomene. Like Lilium candidum will increase in congenial soil. May be planted in late fall or spring. Surround all Lily bulbs with $1 / 2$ inch of sand. Put manure $21 / 2$ inches beneath bulb. Keep manure from near contact with bulbs. Set Lilium speciosum same depth as L.auratum.

The above-named Lilies are the most popular of the many listed in the catalogues.

* Lily, Lemon. See Hemerocallis.


## Whit

Pink
Lupinus polyphyllus, var. Moerheimi. Appears ten days later than the other variety. In congenial soil $3-5 \mathrm{ft}$. both Lupins will give a second bloom, soon after the first flowers are cut off. Same habit as the following.

Blue White

Lupinus polyphyllus: Lupin, pea-shaped flower. May-June Not long-lived. Keep stock in nursery. After the ${ }^{3-5} \mathrm{ft}$. third or fourth year it is apt to disappear. Needs 6 inches of winter covering in cold climate, and remove two-thirds of this covering in late March. It does its best in rich, rather heavy soil, semi-shade, [62]

## PERENNIALS

and above all it must not be allowed to dry outmore dependent on moisture than any other hardy. Sows itself freely. Is killed by lime and Bordeaux Mixture. In a warm, dry climate, and in a sunny position, if possible, give it the shade protection of larger plants. Of all the bloom of this period there is nothing more strikingly beautiful than the Lupin. In some gardens it makes a fair bloom a year from the time sown. But sometimes it is not fully grown until the second year after sowing, depending on the treatment. Good soil and sufficient moisture hasten development.

White

* Lrchnis Chalcedonica, var. alba: Maltese Cross. June, late Where tall, white bloom is needed, this plant for ${ }^{3} \mathrm{ft}$. variety is effective in groups of six or eight plants closely set. Thrives in any sunny position. The red variety is of a tone that clashes with many colors of that period and had better be avoided. Prop. by seed or division in spring.
Maltese Cross. See Iychnis Chalcedonica.
Marguerite, Yellow. See Anthemis.
Matricarla. See Feverfew.
Meadow-Sage. See Salvia pratensis.
Blue
** Mertensia: Blue Bells. An exquisite sky-blue May 1 flower tinted pink. Gives plants a heavy marker as 18 in. foliage drops off in June. Set plants 6 inches apart, in line or group.


## CONTINUOUS BLOOM IN AMERICA

COLOR
Michaelmas Daisy. See Aster.
Mistrlower. See Eupatorium colestinum.
Blue Monkshood: Aconite, Aconitum, vars. Stork's, autumnale, napellus. These are the earlier deep blue varieties and follow Delphiniums' first bloom.
Blue Group six small plants to form a clump. Sun or part shade. Prop. by division.

Monkshood: Aconite, Aconitum Wilsoni. The best variety for September. Grows in sun or shade. Selfsows freely. This deep violet-blue September perennial helps to enliven the mid-September garden when other flowers begin to look a trifle rusty. It follows immediately after hardy Aster, which bloom is generally over by September 7 (near New York). For black blight use Bordeaux Mixture freely around crown, and spray leaves and buds when stalks begin to turn yellow before or at blooming time. Often dies out after five years. Use six small plants for a full clump. Prop. by division or seed.
Mullein Pink. See Agrostemma.
Myosoris palustris, var. semperflorens. See Forget-me-not.

Obedience. See Physostegia.
Lemon (Enothera, var. Youngi: Evening Primrose, Sun- June 1 Yellow
White
drops. Thrives in sun or partial shade. Light, rich 15 in. soil. The white varieties, $O$. cospitosa ( 10 inches)

## PERENNIALS

## COLOR

MONTH HEIGHT
and 0 . speciosa ( 15 inches), are especially desirable for beds in semi-shade. Use four small plants to make one group.

Various * Peonia: Peony. Double, semidouble, and single. Whenever it must be moved, August is the best time 3-4 ft. to transplant in order to insure some bloom the next season, but this course is impossible if beds are full of bloom in August. Use only in very large beds. After roses, no plant requires such deep, rich soil. Roots go deep. The finest Peonies grow in beds where the soil is prepared to the depth of 3 feet, with two or three layers of manure running through it. Eight inches of heavy clay at the bottom helps to retain moisture. Sun or half-shade.

Peach Bells. See Campanula persicifolia.
Blue
** Phlox divaricata. Exquisite shade sky-blue. Set twelve to fifteen small plants 3 inches apart to form a clump measuring 1 square foot. Spreads rapidly. Combines well with early pink or light-yellow Tulips. The Laphami var. is taller and later.

White
Phlox, var. Miss Lingard. It takes three or four shoots to make a fair clump. The next year it will have doubled its size. In sunshine and rich soil with some moisture, if fading flowers are removed, it will have several blooming periods during the summer. Also blooms in semi-shade, as do all Phloxes.

## CONTINUOUS BLOOM IN AMERICA

Phlox paniculata. The well-known, late-blooming July, late variety. Not as frequent a bloomer as Miss Lingard. Allow about twelve stalks to a clump. Lift plant to enrich soil every three years in the fall. Cut off fading flowers to bring second bloom. The richer the soil, the better the bloom. Don't let it suffer from drought.

Pink White Obedience. Two shades of pink, also white. Tubular flowers massed at the top of a spike which is 4 to 5 feet tall. The blossom suggests a little orchid. Roots spread rapidly. A lovely flower for picking, but it is not altogether desirable for a full garden because of its spreading habit and its weak tone of pink. The brilliant pink perennial Asters blooming at the same time are preferable if color effect is the aim of the gardener. This plant grows best in rich, light soil and sun. Use only in a garden where there is ample space to spare. Prop. by division in spring.

Blue Platycodon: Balloon Flower, Japanese Bellflower. July
White Rich blue, also white, and white mixed with lavender. The roots run deep and the soil needs to be deep and rich and not too heavy. Slight winter protection is required. Heavily covered with blossoms for three weeks. Needs staking. Prop. in spring by seed or division. In planting, don't bend long roots, but let them go straight down.

## PERENNIALS

MONTH
HEIGHT

Poppy, Oriental: Papaver orientale. After the May, late Pink Poppy, Oriental: Papaver orientale. After the Avoid using the old vermilion-red. If the rich deep blood-red variety cannot be obtained, don't have red at all. Order the lovely pink variety, of which there is now an abundance in some nurseries. Don't depend on starting it from seed, as the color results are too uncertain. After blooming, the foliage dies to the ground, reappearing in a small growth in September. The tap-root goes deep and the soil should be rich deep loam. Requires sun. Best transplanted in July, if possible, when moving is necessary. With very small plants, set four together.

Primrose, Evening. See Enothera.
Various
** Primrose, Spring. Primula. Great variety. Use for separate spring garden.
Pink
Pyrethrum, Hybrid: Chrysanthemum coccineum. May, late Red Single and double; white and several shades of red and of pink. Many prefer the single variety especially because the flowers are not as heavy and therefore more apt to keep an erect position without staking. There is nothing more welcome in the early garden than a quantity of these daisy-like flowers which, in good soil, sun, and with occasional generous watering and cutting of fading bloom, will remain in blossom nearly a month. Easily raised from seed, it sows itself freely. Don't set plants in garden until their [67]
third year, as bloom of young plants is unsatisfactory and they had better be in the full sunshine of the nursery with nothing to prevent development. Guard against the smothering of the Pyrethrum by large annuals. If bloom must be had from young plants, group three or four close together to make one plant. They are prop. by division, as well as by seed.

White
*Pyrethrum uliginosum (Chrysanthemum uliginoAug., late 5 ft . and sun. Resembles a large Daisy. Twelve plants to a clump. Prop. by division or seed, or by suckers.

Yellow

* Ranunculus acris, var. flore pleno: The real Bach-elor's-Button. Keep spreading roots cut back to a limited square, possibly in a clump 2 by 2 feet. Occasionally change position or renew soil. Use only in a large bed as it is a rapid spreader. Set out in groups of eighteen plants.

Rock Cress. See Arabis.
White Rocket Sweet: Hesperis matronalis. Sweet-scented, June 1 resembles Phlox, rapid spreader. White variety pref- ${ }^{3 \mathrm{ft} \text {. }}$ erable.

Rose Campion. See Agrostemma.
Pink Rudbeckia purpurea (Echinacea purpurea): Cone- July, middle flower. This large, deep-pink flower with its heavy ${ }^{5} \mathrm{ft}$. foliage is effective and worth planting where there is room for it. Especially as at this season there are few
tall perennials in bloom. To form one plant, set three small plants 8 inches apart. Prop. by seed or division. Needs good soil and sun. May bloom six weeks.

Sage. See Salvias.
Blue Salvia azurea, and S. Pitcheri: Pitcher's Sage. Sept. 1 Grows in rich deep soil and sun. The former is sky-blue. The latter deeper blue. Set four nursery plants 5 inches apart to make a clump. Black roots have the appearance of being dead and do not sprout till late spring, so the plant is ever in danger of being discarded by the heedless digger. Keep permanent marker over it. Stake early, as its stalk is slim and inclined to bend. This lovely flower is not used enough. It looks well with hardy Asters.

Blue Salvia pratensis: Meadow-Sage. The deep-blue May, late spikes are 3 feet high when plant is established in its ${ }^{3} \mathrm{ft}$. third year. Strong pungent odor when handled. Shows well next to white Gas Plant or White Pyrethrum. Sows itself freely. Keep a small stock on hand in nursery. Needs rich loamy soil, sun or partial shade. Set three small plants 6 inches apart.

* Santolina incana: Lavender Cotton. Silvery June-Oct. green, evergreen foliage. Bushy. One foot diameter. 1 ft . Four small plants to start a clump. It needs to be kept pinched back into a shapely form.

Sea Bugloss. See Anchusa.

CONTINUOUS BLOOM IN AMERICA
*Sedum spectabile: Showy Stonecrop. Broad, lightgreen, leathery foliage. Large, flat-headed flowers. Increases by root. Leave undisturbed for some years. Plants are bushy and take up some space, but a few are desirable for the August garden. Avoid the palest pink variety. Propagate by division. Set two or three nursery plants together to form one plant.

White Shasta Daisy: Chrysanthemum, vars. maximum, Alaska, and King Edward VII. Often bear flowers 2 ft . standing $21 / 2$ feet high. Increases by root in congenial soil. At this season few plants are more effective, and later it blooms intermittently till mid-September. Prop. by seeds, division, or suckers. Place three or four small plants near together to make one good-sized plant.

Sneezeweed. See Helenium.
Sneezewort. See Achillea, Pearl.
Starwort. See Aster.
Blue *Statice latifolia: Broad-leaved Sea-Lavender. July, late Bloom suggests Gypsophila except in color. Set one ${ }^{2 \mathrm{ft}}$. plant by itself. Don't disturb it. Bloom strong only after being established two years. Bushy when in bloom.

Stonecrop. See Sedum.
Sweet Rocket. See Rocket. [70]

## PERENNIALS

MONTH HEIGHT June, early 12 in.

Pink White Red

Sweet William, London Tufts: Dianthus barbatus. Use var. Newport pink, deep rose, also the light pink, white, and crimson varieties. Avoid mixed colored flowers. It is well to plant the white variety sometimes next to pink or crimson. The plant is not longlived, but is freely self-sown and a supply in the nursery is always necessary. It thrives best in sun and in a rich soil that is not too heavy. In clay soil or in prolonged dampness it sometimes "damps off." Should have thick winter covering of leaves or hay and some coarse manure about the base of stalks, leaving tops exposed.

Thistle, Globe. See Echinops.
Tickseed. See Coreopsis.
White Valerian officinalis: Garden Heliotrope. This is May the old-fashioned variety. Use a few clumps, for its ${ }^{5 \mathrm{ft}}$. delicate beauty as well as for the sake of the fragrance. Cats sometimes seek it and destroy it by lying in the low foliage. Subject to beetle pest. Use twelve plants to make a clump. Prop. by seed or division. Any good soil.
Blue *Veronica longifolia, var. subsessile: Speedwell, July long-leaved Veronica. Blue spikes are 3 feet tall, 3 ft . when well established in rich soil and not allowed to dry out. It is the showiest of the Veronicas. In a cold climate, early spring is the safest time to move it. Rich loam and sun. Prop. by division. Use three [71]

## CONTINUOUS BLOOM IN AMERICA

MONTH
COLOR or four small plants close together to make one good plant.

Blue Yellow
White
** Viola cornuta: Horned Violet. Use only where May-Oct. considerable moisture is possible and a shady position. 8 in . Any good soil. Prop. by seed and division. Increases rapidly by root; clumps should be separated annually. Windflower. See Anemone Japonica.

## Chapter VIII

## WHAT TO PLANT—ANNUALS

> Single star indicates desirable though shorter-lived annuals not named in charts at end of the volume.
most of these annuals bloom till frost HEIGHT

June-Oct. 10 in .

Ageratum conyozoides: Floss Flower. Half-hardy annual. Use the compact, large-flowered variety, "Perfection," for a neat edge; there are other taller varieties for a looser edging. Set 8 to 12 inches apart. Start under glass not later than mid-March for June bloom. Will grow in partial shade, but does better in sun. Blooms abundantly till frost.
White Alyssum, Sweet, Madwort: Alyssum maritimum. Hardy annual. Variety "Little Gem" makes a lovely compact edging 6 inches high. A newer and dwarfer kind is $A$. compactum procumbens, useful when a very narrow dwarf edging is required. In August cut back Sweet Alyssum about half-way in order to have a vigorous bloom until frost. Sow in April or May. It will bloom five or six weeks after sowing and flower continuously till frost. Grows anywhere, preferably in light soil and sun.

Anthemis. See Perennial list, but treat as hardy annual.
monti height
Antirriinum. See Snapdragon.
White Pink Lilac Purple

* Aster, China Aster: Callistephus hortensis Chi- Aug. nensis. Tender annual. The many varieties make se- $2-3 \mathrm{ft}$. lection difficult. The branching Peony-flowered of August and the late branching Aster for early September are among the most popular. Require sun and rich, light soil. Late in July, to prevent approach of beetle (if subject to it), spread ashes over soil at base of plants. If black beetles attack them, pick them off by hand, drop into kerosene water, and make sure they are dead. To begin with, it is well to grow samples of a dozen of each variety of Aster in the nursery or picking garden, and in this way decide upon favorites. Start under glass by April 1, or in garden in mid-May. They remain in bloom about three weeks. Enrich with wood-ashes, or sheep manure. When subject to blight, sweeten soil with air-slaked lime some weeks before planting, and use tobacco dust near roots.

Pink * Balsam, Lady Slipper: Impatiens balsamina. White Tender annual. Rich soil and sun and moisture. 2 ft . If started under glass, set out plants 1 foot apart. It may also be sown in garden after danger of frost is over to bloom two months later. Sometimes convenient to start it late in flats, and have it ready to replace Canterbury Bells, or other annuals that die about July 1. Transplanting twice dwarfs plants [74]

## ANNUALS

COLOR
MONTH HELOHT
into better shape, and pinching out weaker branches produces finer plants, if specimen plants are desired.
Pink Begonia semperflorens, var. gracilis: Elephant'sEar, fibrous-rooted. Tender annual. Light rose variety. Propagate by seed, or cuttings, the latter method preferable. Grows in rich light soil. Should not be allowed to get too dry. Very effective grouped inside of broad band of Sweet Alyssum. Blooms in sun or partial shade.
Various *Begonia, var. tuberous-rooted. Grows best in semi- $\mathbf{1 f t}$. shade. Lift it just before frost and dry tubers. Winter this variety in sand in moderate temperature, cellar or elsewhere.

Bellis perennis. See Daisy, English.
Bluets. See Centaurea cyanus.
*Brachycome iberidifolia: Swan River Daisy. Half June-Aug. hardy. Set these little plants 6 inches apart in a line ${ }^{9} \mathrm{in}$. directly behind Sweet Alyssum, when blue is required. It sends out drooping sprays of flowers which mix attractively with Alyssum. Sow in frame April 1 or outdoors. Pinch back once or twice to keep compact.
Yellow Calendula officinalis: Pot Marigold. Hardy annual. June-Oct.
Pure Gold Avoid the orange shade, unless it is to be used in a 12 in. yellow bed. Varieties sulphur yellow and the white Pluvilis are favorites. Grow quickly from seed in any light soil and sun, and are continuous bloomers Set plants 6 inches apart. Self-sow freely.

## CONTINUOUS BLOOM IN AMERICA

color
Yellow
Calliopsis, Coreopsis: Tickseed, var. Crown of Gold. Flower resembles the perennial Coreopsis. 1 ft . Also variety Drummondii, or Golden Wave, which is quite similar to the foregoing but has a small brown centre. Newer than the old taller yellow and garnet varieties and have a longer bloom, if fading flowers are cut off. Sow a close double row to make a brilliant edging, or else use it just behind Sweet Alyssum. It is hardy and will bloom till frost if flowers are not allowed to seed. Sow where they are to grow, and thin out, but when very young they are transplantable.

Candyturt: Iberis umbellata. Hardy annual. If June a long bloom is desired, make successive sowings; the ${ }^{\mathbf{l} f t}$. first, soon after April 1, to bloom June 1; sow again May 1 to bloom July 1 for three weeks. Two rows of successive sowings may thus grow behind some later and long-blooming annual that edges a bed; for instance, behind Nasturtium. By the time the Candytuft bloom has passed the Nasturtium will begin to flower. The massive pyramid or spiral Candytuft has a longer bloom than the others.

Blue Canterbury Bell: Campanula medium; also C. White calycanthema, biennials. The latter is the cup-andsaucer kind. They thrive best in rich soil and moisture. Staking is necessary when weighted with bloom. Cut off faded flowers and another lesser bloom will follow. Discard plants as soon as bloom is over. Sow seeds in

## ANNUALS

MONTH HEIOHT

May, transplant in June to 6 inches apart in nursery. In September place 10 inches apart in cold-frame, if the climate demands the glass or slat covering in winter. Give air to glass frame in warm winter days. Place plants in the garden in early spring. In a mild climate transplant to the garden in September or October and cover lightly. They die under heavy cover.

Celosia. See Cockscomb.

Blue

Centaurea cyanus: Bluet, Corn Flower, Ragged Sailor, Kaiser Blumen. Hardy annual. Use the tall varieties. Bloom for two months if not allowed to seed. A mass of these plants close-set makes an effective group, especially when surrounded with two close lines of Silene armeria. It is best to sow them in August or early September for May and June bloom, so that later their space may be filled with some springsown plants like tall Cockscomb. Sun and almost any soil suit them. Watering and cutting prolong bloom.

* Centaurea moschata, var. imperialis: Sweet Sul- June tan. A large thistle-like, sweet-scented flower. Thrives 15 in . best in cool, moist climate. Not so hardy as Corn Flower.
* Chrysanthemum, vars. coronarium and Burrid- July-Oct. gianum: Painted Daisy. Tricolored. Tender annual. 11/2 ft. Best to sow where it is to grow and thin out. When 6 inches high pinch back to make bushy. Frequent cutting prolongs bloom.


## CONTINUOUS BLOOM IN AMERICA

color
White

* Chrysanthemum frutescens, var. Marguerite: Paris June-July Daisy. Tender annual. Generally grown from cut- $2 \frac{1}{2} \mathrm{ft}$. tings. Buy the young plants in May so that the best bloom will come the last of June. Plant out May 15.

Pink *Clarkia elegans. Half hardy. Double. Sun or July semi-shade. Use in a large garden when great variety $\mathbf{l f t}$. is required. Set plants 5 inches apart.

White Cleome pungens: Giant Spider Flower. Tender July Pink annual. The white variety is especially effective. ${ }^{5 \mathrm{ft}}$. A tall, slim plant with large head, occupying as a single plant but little room.

Crimson Cockscomb, Feathered: Celosia plumosa. Vars. Aug.-Oct Yellow
Carmine Thompson, magnifica, and Superb, are taller than $3-4 \mathrm{ft}$., the Castle Gould variety. Tender annual. Use the latter near front of bed. Cockscombs grow in any good soil, not too heavy, sun or partial shade. Sown in open ground, seeds do not germinate until about June 1. Better to start Cockscomb under glass April 1. When sown in the cold-frame, if it does not appear as early as other seedlings, don't give it up, but await warmer days. The feathered variety is almost the height of tall Zinnia.

Pink Cockscomb: Celosia spicata. A tender annual. Aug.-Oct. This newer variety, while not as rich in coloring and ${ }^{2-3} \mathrm{ft}$. form, is yet quite effective in groups of three or four [78]

## ANNUALS

plants, rising in slender spikes above Vincas, dwarf Zinnias, etc. Late in the season the pink turns to white.

Coreopsis. See Calliopsis.
Corn Flower. See Centaurea cyanus.

Pink

$$
\mathrm{S}
$$ protection in cold-frame, except in mild climate. Needs moisture to keep it blooming well for five or six weeks. Discard plants after first bloom.

Daisy Painted. See Chrysanthemum Burridg.
Rose
Cosmos, early var. In rich soil and sun, and with July-Oct. fading blossoms removed, the early kind is a long and ${ }^{5-6} \mathrm{ft}$., free bloomer. Sow under glass by April 1. The crimson shade approaches so near to the magenta, an unpopular color with many, that it may be best to use only the pink and white colors.

Daisy, English: Bellis perennis. Hardy annual. May Sow seed in August for spring bloom. Give winter 8 in.

Dianthus Chinensis: Pinks. Hardy annual, double June-Oct. and single. Many prefer the single variety, of which 1 ft . Salmon Queen and Eastern Queen are fine specimens, particularly effective behind Sweet Alyssum. When using a red variety, plant the double white "Snowball" with it, for better effect. Sow Portulaca of same color, sometimes sparingly, around a group of Dianthus. It does best in rich, light soil and sun, with some watering in dry times. Sow in open nursery in [ 79 ]

## CONTINUOUS BLOOM IN AMERICA

MONTH
color
spring, for bloom three months later, or else under glass in February or March for bloom in late June. Under favorable conditions it will survive the winter in the open to bloom the second season.

Yellow Eschscholtzla: California Poppy. Hardy annual. This pretty border flower requires light soil and sun 1 ft . and is at its best in a sea climate. It is essentially a sun plant. While it thrives near the sea, it sometimes "damps off" in long continued rains, even inland.

* Euphorbia. See Snow-on-the-Mountain.

White
Feverfew, Mayweed: Matricaria capensis, alba, June-Sept. plena. Hardy perennial, but treat as hardy annual. Use double white variety only. Sow in August and September, for June bloom. Again in May for August flowering. May also be propagated by cuttings and division. See same in perennial list.

Blue *Forget-me-not: Myosotis alpestris. Var. Vic- May-June toria, one of the best of these biennials, will survive 8 in . cold winter with sufficient protection. Sow in August in frame.

White and pink combined

* Fuchisia: Lady's-Eardrop. Tender annual. In a June-Oct. dry, hot climate this plant succeeds only in partial ${ }^{1-5} \mathrm{ft}$. shade, with ample watering and light, rich soil. Whenever possible, use standard Fuchsia as a background to the lower ones. Choose the pink-and-white combinations. Buds may be picked off at certain times [80]


## ANNUALS

COLOR
MONTH HEIGHT
in order to induce a more profuse bloom when most needed. Buy plants.
Gold and Gaillardia, vars. picta and amblyodon: Blanket-
Red
Flower. Hardy annual. Profuse and continuous bloomer. Set 5 inches apart and plant in groups. Any good soil and sun.

Garnet

* Globe Amaranth: Gomphrena. Hardy annual.

Plant a patch 3 by 2 feet of the garnet-red nana com-July-Oct. pacta, 8 inches apart, margined with a band of the pink variety. Grow in sun and any good soil.
Shell- *Godetia. A delicate, beautiful flower. Half July pink hardy. Does best in rather poor soil. It is not a long 1 ft . bloomer; if alternated with China Aster will finish blooming before the Asters begin. Use only in large garden where great variety is required.

Gompirena. See Globe Amaranth.
Helianthus. See Sunflower.
Blue Heliotrope: Heliotropium. Tender annual. Grown June-Oct. in standard form to the height of 3 feet or more, 3 ft and 1 ft . it is a most effective plant, especially when used with low-growing Heliotrope or Ageratum at its base. A mass of low-growing Heliotrope with a border of Sweet Alyssum or white Petunia is also desirable. The common lilac shade is the more sweet-scented. Variety centifleur is more popular with its rich tone of deep blue. Generally propagated by cuttings in green[81]

## CONTINUOUS BLOOM IN AMERICA

COLOR
house. Cut off fading flowers to prevent a rusty look and to encourage bloom until frost.

Iberis. See Candytuft.
Light pink

* Impatiens sultani: Zanzibar Balsam. Tender annual. Grouped behind Sweet Alyssum in a pink bed, it is most desirable. Pinch back to induce branching. Once started, it is easier thereafter to propagate it from cuttings. The light-pink variety only is advised; is more often seen in England than in this country.

White
*Lantana, var. alba perfecta. Half-hardy annual. A mass of this white plant is often useful. Set plants 7 or 8 inches apart, pinch back centre stem considerably to produce bushy plant. Keep plant trimmed to 12 to 15 inches in height.

Blue
Pink
White

Larkspur: Delphinium. Hardy annual. One of the most valuable of the annuals because of its tall two sowings 3 ft . spikes and fine colors. When fall-sown it blooms at a period (July 1) when the mass of showiest hardy perennials are not in flower (near New York) and the other annuals are only just beginning to bloom. It may be sown also in spring, producing flowers three months later, and thus two sowings provide Larkspur for a long season. Give the fall-sown plants a light, loose winter covering. In early spring transplant to the garden. Sow the spring-sown ones in the open nursery or frame, and move to the garden with roots [82]

## ANNUALS

MONTH
balled, when 2 or 3 inches high. Set them near the elder ones if needed there, or sow in garden.

Pink *Lavatera trimestris grandiflora rosea: Mallow. July-Aug. Hardy annual. Generally sown May where it is to 2 ft . bloom, and thinned out to 10 inches apart. Grows best in sun and rich soil and needs plenty of water. Thrives near the sea. Rather a bushy plant. Use only in large garden where more variety is desired. In flower about a month.

Blue
dark
*Lobelia, var. Crystal Palace compacta. Tender June-Oct. annual. Very effective growing with low Sweet Alys8 in. sum. Set Lobelias 5 inches apart in any light, rich soil, sun or semi-shade. Propagate by seed or cutting. Only frequent watering will give prolonged bloom. Does best in cool climate or else semi-shade.

## Dark

 blue White eyeWhite
Blue
Pink

* Lobelia, var. Tenuior. Tender annual. A taller June-Sept. variety. Use only when sufficient moisture can be supplied, if long bloom is required. In a dry climate it is not long-lived.
*Lupin: Lupinus. Hardy annual. Grows easily May-June and quickly in congenial surroundings; rather difficult ${ }^{2-3} \mathbf{f t}$. to transplant. Needs plenty of water in dry climate, and a good soil that is not too light. Prefers semishade. Sow seeds 5 inches apart April 1 for bloom six weeks later. Once established in a place like a wild garden, it will often perpetuate itself indefinitely. [83]

Marigold: Tagetes erecta. Hardy annual. Use June-Oct.
African variety, Lemon Queen. Not as dainty as most of its neighbors in the garden, but gives so freely to the garden decoration that it should not be despised. Marigold, Pot. See Calendula.
Matricaria. See Feverfew.
Myosotis. See Forget-me-not.
Pink White

White Sweet-scented, excellent for shady position, as well as

July-Oct. 3-4 ft. sun. Closes its petals in bright sun. Set plants 1 foot apart, and pick off the broad lower leaves to prevent crowding when plant has grown. It self-sows so freely that it is unnecessary to buy seeds the second year if you are familiar enough with the young plants to preserve the seedlings when they appear-about June 1. Transplants easily.

Blue Yellow

Pansy: Heartsease. Hardy annual. Most gar- April-Oct. deners sow the Pansy in late August, to bloom the ${ }^{6}$ in.
following spring, and winter it in a cold-frame, from New York City northward. Farther south they are usually wintered in the open ground under a covering of leaves or hay. To do well, the Pansy should [ 84 ]
have rich, fine soil and moisture. It is also sown in spring to bloom in late summer. It is more satisfactory to choose your own seeds, letting the lighter shades predominate, as they are more effective in the garden. Plant in patches of solid colors, or in alternating colors that blend well. Pansy bloom can be had continuously from May to October by having two sets of plants, fall-sown and spring-sown. In the shorter, cooler seasons of the North, Pansies need not be replaced.

Pink
White Crimson

Petunia. The single-bedding Petunia seems to be longer-lived by a few weeks than the larger and double 8 in. or the fringed varieties. Use the single and compact Petunia, as it makes a neater and more even growth. Have white Snowball. Rosy Morn, Pink Beauty, and Brilliant are best in pink. If particular about colors, do not depend upon self-sown seeds, as they are apt to revert to original color. Remove fading flowers. Sow April 1 under glass, if bloom is to begin June 25.

White
Pink Crimson
*Phlox Drummondii. Use this charming plant July, late when the gardener has time to replace it with something else after its comparatively short bloom. It generally blooms about six weeks. Plant 10 inches apart. Pinch out main shoot to induce bushy growth and to prolong flowering season. Keep from going to seed. Sun, good soil, and watering necessary.

MONTH HEIGHT

Poppy, California. See Eschscholtzia.

Pinks White Reds

* Poppy, Shirley, Corn Poppy: Papaver Rhars. Hardy annual. Poppies sown about August 20 will bloom late May. Sown April 1, will bloom late June. When they come up very crowded, thin them out. Those who would use Shirley Poppies in masses in a garden of continuous bloom must be confronted with a serious question: What to do with the space they cover after the bloom of three or four weeks? When sown the previous August to bloom in late May, they will be ready for removal by mid-June, and are easily replaced by long-blooming annuals like Celosia or Zinnias, which are not so difficult to move at this time. If, however, they are sown in spring, the space will be flowerless for the ten or eleven weeks of their growing period till they bloom in late June. When they depart in mid-July, it is not as simple a matter to replace them. Possibly the best advice, especially when spring-sown, is to sow them in a thin line or in small clumps, near plants that will later spread over their spaces. Prefer cool or moist climate.

Pink * Portulaca: Sun-plant. Hardy annual. Few peo- July-Oct. White ple care for the ordinary mixed colors of this plant; but used under separate colors, possibly rose and white, it makes an attractive edging. In the shade and at sundown, this flower closes up, detracting from its beauty. Does not germinate until about June 1, and then develops very quickly. If particular about colors, [ 86 ]

## ANNUALS

MONTH height
do not depend next year upon self-sown seeds, as they are apt to revert to original color. Seems to do as well in poor as in rich soil.
Various Salpiglossis grandiflora: Painted Tongue. Ten- July-Sept. der annual. Lovely shades marked with colored veins. Blooms for two months under congenial conditions. Plants are slim and can be placed 5 inches apart. Prefers rich, light soil. Sometimes difficult to start, and more often satisfactory started in the greenhouse. In some places where it does as well when sown in the open, a second sowing can be made in garden for late bloom. To make them effective in the garden, plant at least eight in a group.
Blue *Salvia farinacea: Sage. Treat as hardy annual, July-Oct. blue. Bushy plant, flowers in long spikes. Use only 4 ft . in large bed, as one plant occupies considerable space, possibly 2 feet square.

Yellow *Sanvitalla procumbens, fl. pl. Creeping plant. June-Sept. Tender annual. Small double flowers. Set plants ${ }^{6}$ in. 6 to 8 inches apart. Mixes well with Sweet Alyssum. Can be kept compact by pinching back, or else let it creep out in slender sprays over a broad patch of Sweet Alyssum. Better sow under glass.

White
Pinks Dark reds Violets

Scabiosa: Sweet Scabious, Mourning Bride. Hardy July-Oct. annual. Use tall variety. Flowers grow on long stems, ${ }^{2-3} \mathrm{ft}$. with but little foliage, so plants may be set 6 inches apart in groups. Has a long, continuous bloom. [ 87 ]

## CONTINUOUS BLOOM IN AMERICA

COLOR
Prefers rich soil, not very heavy, may be started under glass, but grows quickly from seed sown in the garden after frost time.

White Pink
*Schizanthus: Butterfly-Flower. A tender greenhouse luxury, covered with blossoms for a month. A few may be used in a large garden if they can be later replaced by a long and late bloomer. Use light pink preferably.

Pinks White
*Silene armeria: Catchfly. Hardy annual. Used May, late in masses, or as a band (in two rows) around a mass of Bluets, this plant is a valuable addition to the garden when German Iris is in bloom, and later. It is especially attractive when white and the paler of the two pinks predominate. Sow in August in open nursery or cold-frame. In cold climate needs a little more winter protection than do Bluets, but will die under heavy covering of manure. Use salt-hay or straw moderately or slat-frame. Plants may be set 4 inches apart. Moisture prolongs bloom.

White
Pinks

Snapdragon: Antirrhinum. Tall variety. Hardy June-Oct. annual. Possibly the choicest of all the garden plants.

June, July 18 in.

MONTH hEIGHT 2 ft . 2-3 ft. May be had in full bloom through the longest season if sown in hotbed or greenhouse by March 1, and again, in the open by May 1. When June bloom is desired and if it cannot be started in spring in heat nor purchased in plants, then sow in August, and *American catalogues.
[ 88 ]

## ANNUALS

COLOR
winter it in cold-frame. Needs sun and moderately rich soil that is not too heavy. Remove fading flowers to prolong bloom. In Maine, with its shorter season and cooler, moister climate, the early spring sowing is sufficient. Sometimes blooms two seasons.

Whitish foliage

Yellow to Cream white
*Snow-on-the-Mountain: Euphorbia variegata. July-Oct. Tender annual. Foliage plant, green and white. Six ${ }^{2-3} \mathrm{ft}$. plants grouped 10 inches apart makes an effective mass in a large bed. Plants are strong and bushy.

Sunflower, Miniature, Single: Helianthus cucu- July-Oct. merifolius. Hardy annual. Indispensable in the plan $5-6 \mathrm{ft}$. for a long bloom, easily raised, and a continuous bloomer. While young keep it from being crowded. One plant to a space.

Yellow

* Tagetes signata pumila. Hardy annual, a dwarf form of Marigold, with a more attractive fragrance and a finer, more fern-like foliage than any of the others. Compact growth and with small flowers. A row of these plants 10 inches apart near the front of a yellow bed adds sunshine to the garden for those who care for yellow. Pinch back once or twice.

Tobacco Plant. See Nicotiana.
Blue

* Torenia Fournieri. Tender annual. Beautiful July-Oct. little flowers on a bushy plant. Thrives in semi-shade $\mathbf{1 f t}$. and rich, light soil. Better to start it in greenhouse or hotbed. Set plants 6 inches apart in line or groups.
[89]


## CONTINUOUS BLOOM IN AMERICA

## Touch-Me-Not. See Impatiens Sultani.

Pink Verbena, Mammoth. Tender annual. Use deep- June-Oct.

## Blue

Dark blue Verbena venosa, and the darker-red variety and, if possible, secure the pink, Verbena, var. Francis. Set plants about 10 inches apart. When branches grow long peg them down to the earth to take root at these points. Remove all fading flowers and the bloom will continue till frost. To make sure of germination, soak seeds in tepid water for two hours; sow in rich light soil in March (for June bloom) in house or hotbed or greenhouse and transplant to flats. Plant out after frost time. Verbena dislikes heavy soil.

White
Rose
Vinca: Madagascar Periwinkle. Tender annual. Use more white, and white with pink eye than plain deep pink. Sow in hotbed or cold-frame. Set plants 6 inches apart in lines or groups. When planting a line make it a double or triple line for better effect. Its position should be not far from the front edge of the bed.

Pink
Zinnia: Youth-and-Old-Age. Hardy annual. Care- June-Oct.
Buff fully avoid the deep yellow, also scarlet. One of the ${ }^{2-4} \mathrm{ft}$. most useful of all the annuals. In some beds the taller variety is desirable, and again the dwarf kind is preferable. Sometimes the taller may be used in a line behind a line of the dwarf variety. For June bloom it must be started under glass by April 1. It transplants easily in any size. With constant cut-

## ANNUALS

COLOR
ting off of the fading bloom, it continues to look fresh and vigorous until frost. Sown in a sheltered sunny corner of the open nursery, Zinnias will begin to show their color just before July 1, a little later than those sown in the cold-frame April 1. Unfortunately few open nurseries have warm corners. As the seeds under separate colors may not all come true, sow also a packet of mixed Zinnias from which to take the favorite shades in case there are bad tones among the plants of separate colors.

## BULBS

Canna use Pink, White only.

* Dahlia, Cactus, single, etc. Allow one or two tubers to a plant, make a slight hollow in surface of soil above roots, and apply water freely when the bloom is unsatisfactory. Store tubers in winter in moderate temperature. Plant in May or June.

Gladioli. Plant 3 inches deep. They bloom two months after planting. Give house protection in winter.

Tulip, Early Variety, dwarfer.
Tulip, Late: Darwin, Cottage, May-flowering. When flowers fade, remove them, but let the foliage remain until dry. If they must be lifted to make room for other things plant them in good soil outside the garden and place them in beds again after frost has destroyed the garden. They are better left undisturbed.

## Chapter IX

## MISCELLANEOUS GARDENING ADVICE

## A CITY YARD

The following brief plan might be adapted to suit the small area of a city yard, and the photograph opposite this page, of a pergola for the rear of such a yard is a delightful suggestion for the town garden. Covered with Wistaria bloom in May, and climbing Nasturtium in September, how cool and green within and how bright and cheerful this patch of country color brought into the city's barrenness! When the laundry can be elsewhere provided for, the grass plot may be filled with Daffodils and the two periods of Tulips, covering a season of six weeks. Later the green sod gives no sign of the hidden bulbs. The small beds at the four corners overflow with annuals early and late. The most suitable of these for a semishady yard in spring and September are Pansies fallsown and spring-sown, or else fall-sown Pansies followed by white and blue Ageratum, compact Petunias or Torenia, or else the Tulips mixed in with Viola cornuta, h. p. The latter plant in partial shade with [92]


## MISCELLANEOUS GARDENING ADVICE

ample watering is supposed with care to bloom on from mid-May till October 1.

The two long bordering beds, if possible not less than $31 / 2$ feet deep, can contain the same combination

of plants as those advised for the long beds in the discussion of the "Spring and Fall Garden."

The walls may be covered with Akebia quintata with its dainty leaf and purplish spring berry, and with Vitis, heterophylla var., whose iridescent blue [ 93 ]

## CONTINUOUS BLOOM IN AMERICA

berry and delicate foliage are an exceptionally artistic adornment for the indoor flower-bowl in September.

## MY GARDEN

Less than one acre on a hillside. Two terraces, making two flights of steps between the house and lower garden. In laying out this small place, a rather informal planting seemed desirable in order that the restricted space and boundary lines could be treated in a manner that might cause them to be unnoticed, more or less. For this purpose a part of the main path was laid out in irregular lines with just enough shrubbery on either side to conceal the curves. This scheme leaves something to the imagination, which interesting sense is sure to exaggerate and to enlarge while the path keeps turning.

In the upper garden, as shown in the wide view, notice that the planting is made rather difficult by the shade of the Apple-trees, although at the risk of the flowers, the gardener has never dreamed of dispensing with anything as cherished as these graceful old trees. On the right, where the shadows are denser, early wild flowers and Narcissi grow, and Forget-menots appear with the Apple bloom, followed later by the cheerful Nicotiana affinis and Salvia to enliven the shadows. The little formal planting on the left has the sun after ten in the morning and many of the perennials and annuals thrive here.
[ 94 ]
Plate X

My garden
View of upper garden

## MISCELLANEOUS GARDENING ADVICE

In the lower garden, where there is more sun, there are beds of bloom and groups of tall shrubs. A small, curved path between two Rose beds leaves the main walk to end in a grape arbor, through which a grass path leads to the gardener's bower enclosed by shrubs and "skylighted." This circular green room contains a curved white seat and table, and is a peaceful retreat, inviting book and pen, or other quiet pastime. Elsewhere there are nooks for Lilies-of-the-Valley, bulbs in the grass, and a bird bath, while the eightroom purple martin house stands like a lodge near the gate leading into a lane. Absolute simplicity, cosiness, and privacy prevail, all made possible by a few shrubs, trees, and flowers, and some imagination. Contrasting it now with its original state as a grassy slope bounded with fences, one might say-quoting Mr. Lowell:
"Till now one dreamed not what could be done With a bit of earth and a ray of sun."

## THE SEPARATE SPRING GARDEN

Under the title of this book it may at first seem inappropriate that any section of it should be given to a garden of but one period of bloom. The unresisted temptation to dwell on the possibilities of spring alone, will find its excuse in the fact that for lack of space long continuous bloom must usually exclude an early

## CONTINUOUS BLOOM IN AMERICA

spring planting in the main garden, for which therefore provision must elsewhere be made. Then incidentally, to those not at home to enjoy the summer flowers, the separate spring garden will suggest the opportunity for including fall bloom, and here again we have the original scheme of continuous bloom delightfully ignored. Such inconsistency will be pardoned at least by him whom it benefits.

In some favored places spring can lead us to a veritable fairy-land of blossoms in a cosey nook of her own. Perhaps it lies within an outer court of the main garden, or sometimes away in a partly shaded corner of the place, preferably just below a sloping bank upon which is given special opportunity for the fuller display of the lower plants. Within this enclosure late April is represented by clumps of Daffodils springing from the borders of the grassy walks at intervals of 3 feet. Pansies and English Daisies are opening in the small beds. While the rising slope at one end of this garden is covered with Phlox subulata, blue Periwinkles, Primroses, and Daffodils. Later wild Lupins adorn the bank. On the other three sides, just beyond the boundary lines, the Forsythias are flowering, followed by Magnolia and Cherry bloom.

Again, there is nothing fairer than that which May has to offer. A wall of blossoms is possible on shrub and trees just over the line. The bank is blue with Lupin, and the small open beds (if there are any),


[^9]

## MISCELLANEOUS GARDENING ADVICE

are now carpeted in all the dazzling hues of Pansies, English Daisies, Viola cornuta, Forget-me-not (alpestris), etc. Two periods of glowing Tulips may rise in turn from the middle of the open beds. A centre group of Cottage Tulips margined with two closely set lines of early Tulips. The plants in these small beds (Tulips excepted, of course) can be set out in April if the climate does not permit of their wintering in the open.

The wall beds, those against a background, whatever it may be, would contain mainly the taller hardy perennials of April and May, placed alternately the length of the centre line. First, blooming, sky-blue Mertensia Virginica, and Phlox divaricata, the Golden Doronicums, and early and late Tulips. The lower plants growing at the edge are Arabis and Candytuft, alternating with some Pansies. The Tulips, of course, take an important part, and the colors of the different groups should be a matter of careful study.

The second period of May offers quite a choice of plants, but for a small garden this selection is advised. Bleeding-Heart, in front of Valerian at the four corners (if the garden is square) Lupin poly., Pyrethrum, hybrid, Columbine, Oriental Poppy, German Iris, and fall-sown Silene and Bluets. Beyond the walls in early May, the Apple-trees are in blossom, then the Lilacs come, preceding Mock-Orange shrubs and perfuming the air for many rods away.

## CONTINUOUS BLOOM IN AMERICA

## THE SPRING AND FALL GARDEN

When the owner of a separate spring garden in the country would also have a September-flowering plot awaiting him after his summer sojourn afar, it is quite simple to use his May garden for this purpose.

In June when the annual English Daisies, Pansies, and Forget-me-nots have ceased to do their best in the centre beds, they can be replaced by some longlived, low-growing annuals, such as Petunia, Verbena, Calliopsis, var. Golden Wave, or pink fibrous Begonias surrounded by Sweet Alyssum. Any of these plants may also replace the Pansies in the front line of the wall beds.

In the rear line of the wall beds where the May perennials grow, Monkshood Wilsoni should have its permanent place for September bloom, and Septem-ber-flowering Chrysanthemums, Snapdragon, Gladioli, and Larkspur may replace the vanished Mertensia, Oriental Poppy, Silene, Bluets, and Tulips.

## THE OUTER COURT

An outer court to the garden proper is an added delight when space will allow sufficient breadth to prevent a cramped feeling within its walls. The court itself can be treated in various ways and at the same time it gives a sense of special privacy to the garden enclosure. It is an ideal place for an early spring garden.
Plate XII


Luncr garden. End of curvel path to lane

## MISCELLANEOUS GARDENING ADVICE

## COLOR

## COLOR IN MASS

In a garden where bloom is required only for two or three periods, for instance during July and August into September, it is a simple matter to produce the color effect in masses. For a longer space of time it is impossible to give all the periods an equal representation over each bed, except in small groups of color, or single plants depending on size of bed.

## COLOR IN GARDEN

To preserve harmony in the coloring of the garden, orange and light red should be very sparingly used. In fact, it is best to bar out any but dark reds. Unless one is truly an artist a safe rule for the use of orange is to keep it close to pale yellow and white.

In gardens where some beds may be viewed from more than one point, study the effect of color combination from all sides. From one position all may blend well, from another point the eye may connect discordant tones in two adjoining beds that were not visible before. What more painful than a meeting of orange and pink? Or of pink and red Salvia? How welcome the warm touch of dark red or maroon as found in some Hollyhocks, Snapdragon, Verbena, Dianthus, and an occasional Zinnia, feathered Celosia,

## CONTINUOUS BLOOM IN AMERICA

rare, deep-red Oriental Poppy, Pyrethrum, hybrid, and some Phlox Drummondii. Another desirable red is the garnet Globe Amaranth and Agrostemma coronaria. The darker reds will harmonize with everything. Many hired gardeners need to have this subject of reds and yellows brought forcibly to their attention, especially when they must order the seeds and group the plants.

Rarely do our gardens contain sufficient white. Use white freely; it seems to bring out all the other colors with it.

Where all colors are admitted, use also pink and blue plentifully: dark red and yellow more sparingly, except in beds of yellow or red. Let the red bed be relieved with sufficient white and a little blue. In the yellow bed have also some blue and lavender. To the blue bed give some light yellow and white.

In the pink bed, use white, some lilac tones, and a touch of garnet.

## COLOR STANDARD

There is a great demand among gardeners for a color chart to guide us in our description of flowers. The need is for the revision of existing names indicating the various tones of color according to a recognized standard. The question is whether the various horticultural societies and the trade as a whole will consent to recognize such a classification. A chart of "Color Standards" has been recently made, and it [ 100 ]


From a pholograph by J. H. MacFarland t'o.
A separate spring garden
Hartford, Conn., Mrs. J. J. Goodwin


The outer court-"Green Court"
Augusta, Ga., Mrs. H. P. Crowell

## MISCELLANEOUS GARDENING ADVICE

remains to be seen whether the gardening public will adopt it. Mrs. Francis King, who has gone so deeply into the color question, as shown in her delightful book, "A Well-Considered Garden," writes as follows: "If such a color standard could be adopted generally, there would soon dawn a new era in the question of correct color naming in this country." At present our color descriptions are sadly misleading.

## PEONIES IN MASS

In the charmingly planned garden, shown in the upper illustration Plate XVI, suppose the four large beds bordering the central paths were filled with Peonies. It is a great temptation to have a mass of this bloom for the beautiful effect in early June: but let us remember that afterward only the edges of such a bed can be counted on to provide blossoms for the remainder of the season. This plan is therefore not feasible for a garden of continuous bloom, wherein even the largest beds ( 20 square feet or more) should not contain over four or five of these bushy plants. It is necessary that the remaining space in the bed be given to the other flowering periods, the plants of which are almost as effective and occupy less room.

## POPPIES IN MASS

Every one wants Shirley Poppies, and the Bar Harbor picture in Plate XVI is an argument in their behalf, [ 101 ]

## CONTINUOUS BLOOM IN AMERICA

but it is often a difficult problem to handle them satisfactorily in a garden of continuous bloom. In the North, where the summer is shorter and the climate cool and moist especially near the sea, masses of Shirley Poppies can be used to much better advantage than farther south where there are a greater number of periods of bloom for which to provide, and where the climate is warm and dry (except near the shore), which shortens their blossoming season. In Maine, these Poppies, sown in mid-April and again in midMay, will flower from July 1 till frost, if not allowed to overcrowd one another. The first set must not choke out the second. For further information regarding this flower, read of its habits in Chapter VIII.

## TREES AND GARDENS

When questioned as to whether it is advisable to have trees in a garden, the inclination is strong to advocate their use in a large garden which may also have its share of plentiful sunshine. It might be possible to have too much of sunshine ceaselessly for weeks and months, as in some sections of the country, and trees mean varying shadows, and deep reflections in the pool, a cool retreat from the glare and heat of a summer day; trees bring birds, and sounds called music, to ears attuned, and always there is variety, mystic atmosphere permeating the tree, soul-satisfying to many humans. But not so to cer[ 102 ]
Piate XIS



## MISCELLANEOUS GARDENING ADVICE

tain flowers which are our best garden blossoms. They mostly long for the sun, from its rising to its setting, providing they have sufficient water. They show their disapproval too of the wandering tree roots that find their way to the rich soil of garden-beds. Undoubtedly the garden that is treeless will produce the finest plants in the greatest number, but there are gardeners who prefer fewer flowers and more green foliage and more shadows.

Beneath the high-arched trees, the few shadeloving plants can be used, but these are not often of the class which give much color effect. In such a garden growths of evergreen shrubs are especially welcome, while in every open space, where the sun will always find them, should be grouped the flowers that give the beloved color. The gardens shown opposite pages 102 and 106 are beautiful examples.

When trees are not desired within the garden, at least they should have their place in the background as a setting to the garden, when there is room enough for them on the property. They should be considered, with the wall or hedge, as part of the boundary plan.

The trees in the background of the attractive but simple garden in Plate XV might almost be called its chief feature, thereby illustrating the argument in favor of a setting of trees in which to frame the garden.

When starting a new place or garden, do not cut down a single tree until you are positive it will never [ 103 ]

## CONTINUOUS BLOOM IN AMERICA

be needed. An established tree, especially one gracefully shaped, may sometimes be found to be invaluable, literally worth its weight in gold, as an ornament within or outside the garden. No new tree could replace it in this or the next generation. If trees are to be planted as a background to the garden, the Weeping Willow has its advantages, growing quickly, the earliest and latest in foliage, healthy and easily trimmed to shape. Contrary to prevailing opinion, it will thrive in (some) dry places, and its roots are no more troublesome near a dry garden than other tree roots, for they mostly go down deep, seeking moisture. Of course the Willow is not as long-lived as Oaks and others. It would be possible often to set out a line of Willows or Apple-trees beyond the garden wall, and to place, 50 or 60 feet behind them, some English Oaks, which are slow-growing. When the Willows or Apple-trees shall have lived their day, a future generation will bless you for the Oaks. Always try to plant for the future as well as for yourself in the present!

## THE ROSE GARDEN

The Rose garden which is planted with monthly Roses furnishes the house with cut flowers during a prolonged period, and this may be all that is expected of such a garden, but there is yet one more thing that it may supply if required. Ordinarily, the color [ 104 ]

## MISCELLANEOUS GARDENING ADVICE

effect in Rose gardens is weak compared to the rich bloom of the main garden; possibly this point is not a matter of importance to the owner who considers the place more as a picking garden where the pleasure lies in gathering baskets full of lovely color for the house vases. However, should one wish to increase the color in the Rose garden all that is necessary is to border the beds with the dwarf pink or red Baby Ramblers, set about 1 foot apart. These Baby Ramblers have several periods of bloom, if trimmed back to within about eight inches of the ground, after each bloom, and providing the plants are amply fed and watered. They are profuse bloomers. If the Rose bed measures about 5 or 6 feet in width, two rows of the taller best blooming varieties are sufficient for the inner space of the bed. La France, Dean Hole, Etoile de France, Kaiserin Augusta Victoria, Lyon Rose, Madame Caroline Testout, Gruss an Teplitz are among those which flower the most freely.

In order to take away from the flatness of a Rose garden, where the plants are mostly of a uniform height, standard Roses can be used at the corners of the beds, and climbers may have a place in the background, and covering arches over the paths.

In the climate near New York City, the standard Rose does not often survive a winter in the open, therefore the following treatment is advocated. In the late autumn open a trench deep enough to lay [ 105 ]

## CONTINUOUS BLOOM IN AMERICA

the standard Rose plant full length, with a covering of earth about 8 inches above the bushy part. Mound the ground on top so that water may run off, and not settle there. Add a layer of manure on top. This same method is often employed for the winter protection of other Roses of the more tender class.

If Gladioli are planted in the Rose beds July 1, they will flower in September when the Roses are not quite as numerous as in the preceding months.

Dry blood and sheep manure occasionally for nourishment, Scotch soot once or twice to intensify color of leaf and flower, slug-shot dusted on the wet leaves and sprayed off two days later will conquer the pests if applied weekly for a while-these are the first rules for summer treatment of Roses.

CONTINUOUS WINTER BLOOM IN THE FLOWER-BOWL From the Garden

Indoors the flower-bowl may contain an unceasing supply from outside for twelve months, although the garden products are supposedly limited to the months of little or no frost. November arriving in our cold climate finds for its adornment only hardy Chrysanthemums, almost ready to succumb, while some foliage and grasses still retain paling tones of russet and red. Then the garden is almost forgotten until the Crocuses and Scillas come in March. But, during the [ 106 ]


Trees as a background
"Fairlawn," Lenox, Mass., Miss Kneeland


Trees in Preston Garden
Columbia, S. C.

## MISCELLANEOUS GARDENING ADVICE

long interval of many weeks between fall and spring the bowl on the dining-table need never be empty if there is at our disposal outdoors the evergreen Myrtlebed, and the cheerful berries of the Berberis, the latter leafless, of course, when first brought in, but soon in the temperature of a warm room it will put forth the daintiest of tiny spring green leaves, which never develop to full size under these conditions.

Use a low glass flower-bowl, and within it at the bottom a round glass slab filled with perforations to hold flower stems. These stem supporters are obtainable at almost every crockery-store. Cut sprays of Myrtle (Periwinkle) about 6 inches long and twigs of berries from the Barberry bush, and mix them not too densely in the bowl. Both plants will make new growth for a while, and they need not be renewed more than three times before March, if the water is changed several times a week. It is with delight in mid-winter that one beholds this welcome, though simple contribution to the table decoration. Later, for a change, instead of Barberry, small branches of Forsythia as well as Apple-blossoms can be forced into bloom, and always the Myrtle is invaluable as a foliage setting. Its blue flowers will not appear by this sort of forcing.

## Chapter X

## SOME MINOR SUGGESTIONS

The author's earlier book, "The Seasons in a Flower Garden," is more or less a collection of the simpler "Do's," and "Don'ts," of garden-life, and consequently it would not perhaps be very profitable to add much of general advice on the care of plants for the completion of this volume. A few additional instructions, however, especially for those who have not had long experience, may be found of use at this point.

## THE FIRST RULE

After the garden has been planted avoid the notion that thereafter only a little care will be required-that the gardener can go to the garden when all the rest of the work on the place has been attended to. It should be garden first or else no garden. No garden is better than a poor, neglected, slovenly plot. Economizing on the gardener means waste of plant-life and disappointments generally.

By order, I do not mean that plants should look as rigid as an inverted broomstick, which happens some[ 108 ]

## SOME MINOR SUGGESTIONS

times when they are too tightly tied in the middle. Let the main stem be supported by stakes, tied with green cord, with the side branches free to spread as nature meant they should, except those that need to be pinched back to induce branching, or when they are shading some plant requiring light. When Cosmos, Sunflowers, Dahlias, or any of the plants with a strong centre stalk are allowed to have "humped-backs," then the garden begins to look neglected, and after several days of such crookedness they are like Humpty Dumpty, for nothing can make them right again. However, spreading plants like Petunia, Verbena, Ageratum, etc., may sprawl freely without being ungraceful, only take heed lest they sprawl over something that wants to be left alone and free. Another sign of neglect is when fading flowers are not removed. Zinnia, Heliotrope, Ageratum, and some others will wear a very rusty look when thus neglected, which is hardly to be tolerated in the garden that we love.

When it is desirable to cut back part of a perennial that has finished blooming, allow sufficient foliage to remain to permit of continued breathing and feeding through the pores of the leaves.

## PEONIES

If a Peony plant is crowding other things, trim it only lightly at first, and loosely tie the stalks together. By mid-August it can be cut down considerably, as it
[ 109 ]

## CONTINUOUS BLOOM IN AMERICA

will then have acquired most of the vigor necessary to sustain its bloom for the next season. For this reason July is a good time to feed its roots. When Peonies must be moved, August is the best month, in order that they may take root again before becoming dormant.

## LILACS

Within a month after the Lilac has finished blooming, cut out the suckers from around the base, feed and water it generously, and you are quite sure of fine bloom the following year, providing the shrub has been established in its place a year or more, and that the soil is even moderately good. The same rule holds for all shrubs needing to be improved, and which after blooming proceed to make their buds for the next year. Perhaps it is needless to add that the pruning time for this class of shrub is immediately after blooming. Don't prune Lilacs often.

## PRECAUTION IN THE PERENNIAL BED

An extra precaution for the preservation of our perennials is not to have the beds dug over in spring until nearly May 1, near New York City, and somewhat later in a colder place. The most careful digger is apt to stab the unseen plants, or to break the very brittle young shoots of plants just appearing. However, by April 1, lift carefully with a fork most of the litter from the beds.


From a photograph by J. II. MacFarland C'o.
Peonies in mass
Long Island


From a photograph by J. H. MacFarland Co.
Shirley poppies
Bar Harbor, Me.

## SOME MINOR SUGGESTIONS

PERMANENT MARKERS
There are a few perennials so late to appear in spring that it is well to mark their places with an iron rod, as wooden stakes are apt to break off in winter. These plants, which are quite long-lived are Anemone Japonica, Salvia azurea, and Eupatorium colestinum; and, because of its longevity, Gas Plant also deserves a permanent marker as does Mertensia, because its foliage disappears soon after bloom is over.

PLANT IN STANDARD FORM
With the exception of the standard Rose, Americans use few plants in standard form. It is to be hoped that we are soon to give more attention to this method of getting the best effect from certain plants, for undoubtedly the standards outrank all others in profusion of bloom. The plants in standard form to be found in some American catalogues are Rose, Heliotrope, Fuchsia, Laburnum, Snowball, Weigelia, Locust, Wistaria, and Hydrangea. Some of them may be kept in tubs, and moved to the garden at their blooming time, replacing some earlier blooming variety; for instance, a succession of Wistaria, Snowball, Rose, and Hydrangea; but Heliotrope and Fuchsia bloom all summer.

LUPIN AND GAS PLANT

Perennial Lupin poly. and Gas Plant bloom at the same time, the one in colors of white and blue, the other

## CONTINUOUS BLOOM IN AMERICA

in white and pink: both doubtless equally popular. Lupins live only a few years at the longest; Gas Plants are very long-lived, and therefore give better satisfaction. If possible, however, in the narrow beds always endeavor to grow the Lupins rather than Gas Plants, as the latter when full-grown are too bushy for a small space. It takes several years before their roots are well established, and they become profuse bloomers. Plan for them eventually in most beds. See illustrations opposite page 24.

In the first three years of a new garden Lupins should be freely used while Gas Plants are slowly developing. The later blooming Lupin Moerheimi is invaluable to its period.

## GENERAL HINTS

When a Privet hedge is desired, choose the rounderleaf variety. The foliage of the slim, more pointed leaf is not as dense. The rounder-leaf Boxwood plant is also generally preferred as an edging.

Because the life of Arbor-Vitæ is scarcely over seventy-five years, it is well to select as a hedge plant some longer-lived evergreen. Consult a nurseryman of your district.

Hollow slightly the surface over the roots of shrubs and deep-rooted plants to keep all the water from running off.

In moving annuals, the size, for instance, of 5 -inch
[ 112 ]

## SOME MINOR SUGGESTIONS

Larkspur (larger Larkspur do not transplant well), water from a cup, with a pail near by, is more easily and directly applied than from the spout of a water-pot. The plants most sensitive to disturbance should have several cups of water to soak the hole and soil around the roots. Don't depend altogether on rain-soaked soil when transplanting annuals.

Heavy clay soil may be broken up by a thorough mixture with it of ashes or sand and if possible leafmould. It takes less of sand than of other substances to make the clay friable, but the former, of course, impoverishes the soil, and necessitates plenty of fertilizer to counteract this effect. Leaf-mould, unless in large quantity, without ashes or sand is not sufficient to lighten clay soil.

In planting Pansies, use in the majority of the groups masses of separate colors, rather than mixtures, and let the whites and yellows predominate. Set out good-sized plants in April, if they are to adorn an early spring garden. This means the sowing of them August 1. Those intended to begin bloom in late May, should only commence to be at their best about May 20, and for this reason don't sow them till late August, and plant out May 1.

If Wistaria will not bloom, some one advises digging down about 2 feet to cut off a part of the tap-root in order to force out more of the fibrous roots which will produce blossoms.

## CONTINUOUS BLOOM IN AMERICA

For very best results sow Hollyhocks where they are to grow.

It takes so long to raise bulbs from seed that it is not worth while to attempt it excepting with Dahlias.

When transplanting, move Irises, Oriental Poppies, Lilies candidum if possible a month or two after blooming to insure more perfect flowers the next year. In congenial soil they can remain undisturbed and prosperous for years.

Rhododendron, Azalea, and Laurel must not be treated with manure, but need plenty of leaf-mould in the soil and old leaves over the surface of soil winter and summer.

With choice specimen Boxwood, brush off the snow as soon as possible before it begins to melt.

Ashes near, but not in contact with bulbs is advised when they are menaced by mice.

Unless the soil is renourished, few annuals do well in the identical space for more than two successive years.

Never forget that removing fading flowers on annuals prolongs bloom. The same rule applies to perennial Coreopsis, Agrostemma, Feverfew, Delphinium, Gaillardia, Foxglove, Lupin, Phlox, Salvia pratensis, and Shasta Daisy.

The annuals especially requiring an early start under glass, are Heliotrope, Begonia, Impatiens, Lobelia, Schizanthus, Torenia, Sanvitalia, Brachycome, Lantana, Euphorbia, Vinca, Verbena, and Ageratum.
[114]

## SOME MINOR SUGGESTIONS

Where soil is but moderately rich, the climate hot and dry, and frequent sprinkling impossible, sow Campanula medium in May as they will be slower in growing than those started in late June under more favorable conditions.

When planting annuals and perennials, avoid placing roots in contact with manure. A careless gardener generally ignores this rule, and the result may be disastrous.

Pink Zinnias and Petunias in the best rose tones, are perhaps the most important annuals in a garden of prolonged bloom, but unfortunately, these seeds are most unreliable, especially those of Petunias and the dwarfer pink Zinnia; neither does the light yellow shade always come true, and a dark red Zinnia is almost impossible to obtain. In order to procure plants of the right colors, sow more than will be required; you may then reasonably hope to find a sufficient number in the desired shades.

Gardeners who are particular about color blending should attempt to secure their own seeds from the best shades of the following plants: Zinnia, Petunia, pale yellow Anthemis, the most double white Feverfew, and light pink and white Silene armeria, but with only a little of its magenta pink. Feverfew left to self-sow in good soil will supply us the next year with three or four successive crops, offering the opportunity for a monthly first bloom of this useful flower, in-

## CONTINUOUS BLOOM IN AMERICA

stead of the later and weaker bloom of the older plants. The latter can be discarded for new ones; nothing transplants so easily. In the scheme for continuous bloom, Feverfew, Larkspur, Canterbury Bells, and Zinnia are invaluable. The latter only has a long and uninterrupted bloom, but the others are useful in supplying bloom at times when otherwise the garden coloring may be weak.

The author's final message for "perfecting the planting in a bed of continuous bloom is to use sufficient plants to prevent any vacant spaces being visible after the plants have reached maturity. Plant should touch plant, and there will inevitably be fewer weeds, and the massing would become more harmonious and effective.

## PLANTING CHARTS

## PLANTING CHARTS

The following charts do not contain quite all the plants that may be included in plantings for continuous bloom. It is a question of preference where some are concerned. Large gardens could have a few other varieties, some of which are named and marked with a star in the chapters on "What to Plant."

The names on charts printed in black ink are perennials; red ink indicates the annuals.

The author's earliest experiments were made in her own garden, and later experiences in the larger gardens of friends furnished ample opportunity for developing satisfactorily an accumulation of ideas and aspirations. The charts are facsimiles of successful plantings.

In attempting to follow the plans, successful results will be at last attained only when the gardener has learned the knack of crowding without detriment to the plants. Any one familiar with his flowers will know when to allow a 6 -inch space to a slim annual, and 18 inches to a bushy perennial, and when to fill a space with one or with more of a kind. Staking the plants likely to lean over and the trimming of the spreading lower leaves that are shading a neighbor are absolutely necessary for success in such beds.
[ 119 ]

## PLANTS USED IN CHART NO. I

pine, blue, and white
Narrow Wall Bed—412 $\times 40$ Feet
Clumps refer to small plants set close together, like Phlox, and groups have 6 inches or more separation between each plant. PERENNIALS veloped. Wilsoni; 3 large plants at rear.
Phlox; pink; late; 4 clumps. 12 or more plants; 1 plant in a space.
Sweet William; white, pink, alternating; 18 plants. group; replaced Tulip, late Darwins; 3 bulbs, 4 or inches

## ANNUALS

Canterbury Bells (Campanula medium); white, pink, and blue; 15 Pansy; mixed colors, but white predominating; 1 line 3 inches from Salpiglossis; replacing Tulips and Swe William.
Scabiosa; replacing Tulips and Sweet behind Larkspur; later removed. Littl Gem; 1 line, later replacing Pansies. (Read Sweet Alyssum Litt page 10.)
*Nore--In climate where Lupins polyphyllus are easy to grow, use Lupins in preference to Gas Plants in narrow beds.

வ퀴4アコ
Wall Bed - $4 \frac{1}{2} \times 40$ Feet



## II

Left Half of Wall Bed-12x 36 Feet

## PERENNIALS

Anchusa Italica, var. Opal; 5 groups, 3 plants, set 8 inches $\begin{aligned} & \text { Eupatorium colestinum; } 3 \text { clumps; } 8 \text { plants to a clump. } \\ & \text { Helenium, var. Riverton Beauty and var. Riverton Gem; } 5\end{aligned}$ Helenim, 6 plants to clump. set close. clumps; 6 plants to clump. set Holy, German; 3 groups; 6 plants to group; yellow. Lupin poly.; white, blue; $\varepsilon$ plants. apart, to a group; 1.5 plants.
Anemone Japonica; 2 large groups white; 10 plants to each
group at outer ends of hed. 4 plants; remove after first
bloom.
Aster; 2 clumps bluc, 3 clumps white; tall, late August; 7
September
plants to clump.
Cbrysantbemum; 5 groups, 3 yellow, 2 white;
flowering; 3 plants to group; 8 inches
Dahlia; 5 plants, ycllow; trim off lower
Marigold, etc.
white, 3 spaces blue plants.
Delphinium formosum; 5 plants, blue.
ANNUALS 10 plants spring-sown, re-
*Calendula; 9 plants, 5 lemon-yellow, 4 orange; replacing $\dagger$ Larkspur; light and dark blue; 10 plants spring-sown, re-
Pansies; in 1 scallop: double quantity for the 2 scallops.
Calliopsis, Crown of Gold; 15 plants to 1 space; also var.
lop when May bloom is required. but if used set plants Sanvitalia procumbens; not necessary,
6 inches apart, outlining scallops.
Sunflower, Miniature; 6 or 8 plants, sct directly in front of

Sweet Alyssum. Little Gem: sow mid-April over all space
outside of scallops.
keep bushy. Fill, spaces on line. Zinnia; dwarf variety; lemon-yellow and white, one line; plants and in a bed of mixed colors Ageratum, light-pink Petunia, piak Dianthus, etc.,

CHART NO. II
Wall Bed-12×36 Feet. Plan Shows Left Half Bed

|  | Helen. ium Riv. Beauty | Holly. hock |  |  |  | Helen. (U) R. Gem | $\mathrm{Holl}_{y}$. hock | Aster blue h. p. | Dah lia | $\begin{gathered} \mathrm{H} \\ \mathrm{iu} \\ \text { Rin } \\ \text { Rin } \end{gathered}$ | $\begin{gathered} =n- \\ \sqrt{5} \end{gathered}$ | $\frac{y}{k}$ | Aster <br> White, |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0. Poppy | Sun. flower | Lark. <br> shur | Mari gold | Lark spur F. | 0. Pophy | Sut. flower | Lark- <br> spur <br> F. | Mari. gold | Lark spur F. | 0. Pophy | Sunflower | Lark shur f. | gold <br> Mari |
|  | $\begin{gathered} \text { Delph- } \\ \text { inivm } \\ \text { form. } \end{gathered}$ | Anch. usa | Monks.  <br> hood $\begin{array}{c}\text { Deiph-in- } \\ \text { iUm } \\ \text { form. }\end{array}$ |  |  | Monks_ hood |  | Delph. inium farm. | Ahehusa |  | DEIph. inium form. |  | Monks. hood | Anch. usa |
|  | German Iris | Phlox late | $\begin{array}{\|l\|} \hline 2 \text { Cant. } \\ \text { Bells } \\ \text { SLarks } \end{array}$ |  |  | $\begin{array}{\|l\|l\|} \hline 2 \text { Cant: } & \text { German } \\ \text { Bells } & \text { Iris } \end{array}$ |  | Phlox late | Cant $B \in \\|$ | $\substack{\text { Anth } \\ \text { emis } \\ \\ \\ \text { S. } \\ \text { Cant } \\ \text { Is } \\ \text { Larlis } \\ \hline}$ |  |  | $\begin{aligned} & \text { German } \\ & \text { Iris } \end{aligned}$ |  |
| $\begin{array}{lll} n & 0 & \frac{3}{3} \\ n & j & \frac{3}{3} \\ n & n & \\ & 0 & 0 \end{array}$ | Chrysin the mum | $\begin{array}{ll} \text { Feverfew Feverfew } \\ \text { Zinnia Lupin Zinnia } \end{array}$ |  |  |  |  |  | Chrysan themum | Feverfew FeverfewZinnia Lunin Zinnia Lupin |  |  |  |  | in |
| $\begin{array}{lll} 0 & 0 & 4 \\ j & j & 4 \\ y_{\infty} & \text { a } & 0 \end{array}$ | Shasta Daisy |  | onenoth erd Youngi | Euhat orium C.el. | Delphinium Chin. | Choth- Pelph. <br> Era <br> Era <br> Youngium <br> iniun <br> Chin. |  | Shasta Daisy |  | Fnoth Era <br> Youngi | $D \in l_{h} h$ inium Chin. | Enoth era Young | Eunatorium Coct. | Sha |
|  | Swet Wm. Tagetes S |  |  |  |  | Sweet Wm. |  | Tageles |  | Sweet Wm. Tagetes |  |  |  |  |

[^10]
## III <br> No. <br> CHART <br> PLANTS USED

## BLUE PREDOMINATING

## Comner Bed - Rear Lines, 22 Feet and ${ }_{25}$ Feet

## PERENNIALS

Agrostemma cor.; white; 2 or 3 clumps; 4 plants to clump. Iris, Japanese; white and blue; $\boldsymbol{2}$ groups; 6 plants to group. Anchusa Italica, Opal; 3 groups; 3 plants to group.
Aster; tall; 1 white clump; 2 blue; 8 or 10 plants to form a clump.
Campanula persic.; 3 blue clumps, 3 white; 4 plants to clump.
Chrysanthemum, September-flowering; 3 yellow, 2 white groups; 3 plants to group.
Coreopsis; 2 plants; 1 Coreopsis; $\mathbf{2}$ plants; $\mathbf{1}$ at either end.
Delphinium belladonna; $\mathbf{1}$ plant in ce

Delphinium belladonna; $\mathbf{1}$ plant in centre of Zinnia line.
Delphinium Chinense; 2 white, 3 blue groups; $\mathcal{Q}$ plants, 6 in to a group.
Delphinium form

Delphinium formosum; blue; 7 large plants at rear.
Echinops sphær. or ritro.; 2 large plants.
Eupatorinm coelest.; 3 clumps; 6 plants to clump.
Gas Plant; white; 8 or 9 next to rear line.
Hollyhock; white, yellow; 10 plants; rear line.
Iris, German; blue, yellow; 2 groups; 6 plants to group.
Ageratum. Perfection; 3 plants in each of the 5 spaces.
Calliopsis, Golden Wave and Crown of Gold; sow in 6 spaces. (Tulip and sweet William later discarded.)
Candytuft; sow one line; lavender variety mived with white; 10 inches beyond edge of bed; by the time it has died Ageratum. etc., will cover space.
Canterbury Bells; white, blue; 5 of each color; ald mure if there is
Cosmos; white; early variety; 10 plants at rear. sweet Alyssum. Little crem: replacing Pansies la
Zinnia, dwarf variety; lemon-yellow; 6 or more.

Note.-In nurthern climate where seasoo is shurter Pausies oeed oot be replaced by Sweet Alyssum, and one sowiog of Larkspur may be sufficient.


## Chart NO. IV <br> USED IN

## PINK AND WHITE, SOME BLUE

## Open Bed- $\boldsymbol{r}^{3}$ x 28 Feet

## PERENNIALS

Anchusa Italiea, Opal; 1 clump, centre; 3 plants to clump. $\quad$ Gas Plants shall have become profuse bloomers Lupins might Anemone Japonica; 1 large clump; white; at either end of bed; 10 Monkshood Wilsoni; plants to a clump. Pyrethrum, hybrid; 9 plants, pink and white, on bothants to group. hasta Daisy; 2 or 3 groups on both sides olternating with Tulips; 1 Sweet William: colors, pink and white, alterd later.
Tulip, late. Cottage; pink and white; 3 bulbs to group, alternating witl Sweet William.

## ANNUALS

Canterbury Bells (Campanula medium); pink, white; on both sides Petunia, compact; pink, also white; plant 6 white, then 6 pink, and bury Bells' spaces.
Daisy, English; mixed; edging the bed; early; later replaced by Petunia.
Larkspur, fall-sown; pink and white; centre line; in as many spaces as possible.

## PLANTS USED IN CHART NO. V

## FOUR SMALL OPEN BEDS

Dimensions of Outer Oval, $19 \times 22$ Feet<br>Centre Bed - 5 Feet Diameter. Bird-Fountain Pedestal Base - 2 Feet Diameter

## PERENNLALS

Lilium candidum; 9 bulbs, around bird basin.
Tulip, late, Cottage variety; pink and white; 18 bulbs, on circular line in centre bed.

## ANNUALS

Ageratum, var. Perfection; 8 plants in a line on inner edge of each of 2 beds.
Daisy, English; 2 dozen mix with Pansies, in 2 of the beds.
Heliotrope, Standard: the large $H$ s stand for Standard Heliotrope; 3 plants in each small bed; 5 plants at regular intervals in centre bed.

Pansy; in 2 beds; white and blue, mixed; 5 dozen or more in a bed. In 2 beds mixed Pansies, 3 dozen or more in a bed, with English Daisies.
Petunia; in 2 beds, pink Petumias edged with white Petunias. In 2 beds, white Petunias edged with pink Petunias. About 36 plants required for each bed.

## CHART NO. V

Four Small Open Beds - Dimensions of Oval, $19 \times 22$ Feet. (For H, see opposite page)


# PLANTS USED IN CHART NO. VI 

PINK, WHITE, AND SOME BLUE

## Round Bed - 14 Feet Diameter

## PERENNIALS

Anchusa Italica, Opal; 3 clumps; 2 or 3 plants 6 inches apart, to clump.
Campanula persicifolia; white, blue, alternating; 8 or 9 clumps; 4 plants to clump.
Chrysanthemum, September-flowering; 2 pink, 1 white; 3 clumps; 3 plants, set 6 inches apart, to clump.
Delphinium belladonna: 4 plants.
Foxglove: pink: 3 plants.
Gas Plant; 2 white, 1 pink.
Iris, ferman: white: 2 clumps; 6 plants to a clump.
Lupin polyphyllus; white and blue; 4 plants.

Phlox, late; 2 pink, I white; 3 clumps.
Platycodon; 2 white, 2 blue; 4 groups; 2 plants to group.
Pyrethrum, bybrid; pink, white; 9 plants; large.
Shasta Daisy; 4 groups; 4 or 5 plants to group.
Sweet William; white and pink alternating, in outer line; 9 plants. Remove after bloom, fill spaces with Heliotrope or Diauthus.
Tulip, Cottage, late; white, pink; 9 groups; 3 bulbs to a group.

## ANNUALS

Bluets, mixed; 20 or more plants massed together in centre ( $Q$ feet diameter), bordered with line of Silene.
Canterbury Bells; pink, white; 6 plants; set in front of Feverfew.
Dianthus, Chinese; pink; 9 groups on outer edge; 3 or 4 plants to group, alternating with patches of Sweet Alyssum.
Feverfew; white, double; 5 plants behind Canterbury Bells. Fall-sown and May-sown.
Heliotrope; groups of 3 plants; 8 or 10 groups in spaces near front.
Larkspur; pink, white; fall-soun, also spring-sown ( $F$. and S.) ; possibly 6 or 8 in Chrysanthemum line and 4 white on Ziania line.

Pansies, fall-soum; white and lavender alternating.
Scabiosa; set 5 or 6 near together in a line in 3 groups, alternating with Snapdragon and Vinca.
Silene armeria: 1 close line encircling Bluets; later remove Silcne and Blucts, giving more space for Zinnias.
Suapdragon; white, pink; 8 plants.
Sweet Alyssum, Little Gem; plant in I line patches alternating with Dianthus.
Vinca; white. Set a fow Vinca plants near together in 3 or 4 spaces behind Pyrethrum line.
Zinnia; pink; tall variety; 4 or 5 plants, to be the centre background by midsummer; plant just outside the Bluets, which are later removed.

## CHART NO. VI

Round Bed-14 Feet Diameter


# PLANTS USED IN CHART NO. VII 

PINK PREDOMINATING

Large Square Open Bed - Diameter $20 \times 22$ Feet
Diameter of Inner Circle, 3 Feet

## PERENNIALS

Agrostemma cor.; 4 clumps of white, 2 of garnet; 4 or 5 plants to clump.
Anchusa Italica, Opal; 5 groups; 3 plants to group.
Chrysanthemum, September-flowering varieties; 5 groups, 3 pink, 2 white; 3 plants to group.
Columbine; 6 pink to fill 6 spaces.
Delphinium Chinense; light blue and white; to fill 4 or 5 spaces on two sides of bed; 2 plants to space.
Delphinium formosum; 3 plants near centre, also one $D$. belladonna near each corner.
Feverfew; double white; 10 plants; 2 sets.
Foxglove; white, pink; 4 groups; 2 plants to group.
Gas Plant; white and pink; 3 or 4 groups; $\mathcal{q}$ plants, 8 inches apart, to a group.
Iris, German; pinkish Queen of May clump at each corner; 3 clumps on inner line.

Iris, Japan; white; 3 or 4 clumps on inner line. Lupin Moerheimi; 6 plants; white, pink.
Lupin poly.; white; 7 plants, white.
Peony; white, pink; 3 plants.
Phlox, late; pink; 3 or 4 large clumps.
Phlox, Lingard; 4 or 6 clumps.
Poppy, Oriental; pink; 8 large plants.
Pyrethrum, hybrid; 10 pink and white plants.
Rudbeckia purp.; 4 large plants at corners; 3 plants, 6 inches apart, to a group.
Salvia azurea; 3 or 4 groups; 4 plants to group; behind late Phlox.
Sedum spec.; 4 clumps; 4 corners.
Shasta Daisy; 8 groups; 5 plants, 6 inches apart, to group.
Sweet William; light pink and salmon-pink; 3 dozen, alternating with Tulips.
Tulips, Cottage; selection of pink and white varieties; in groups.

## ANNUALS

Bluets (Corn Flower); white, pink; massed in centre of bed; edged with Silene.
Candytuft; white, pink; sow a few seeds in patches late April, alternating with Petunia spaces behind Pansy line.
Canterbury Bells (Campanula medium); pink, white; 15 plants.
Cosmos; 4 or 5 plants; early white, pink; plant on outskirts of Bluet-Silene patch.
Geranium; 36 rose-pink, if Impatiens is not obtainable.
Impatiens Sultani; 48 light pink only; if it cannot be had, use pink Geraniums.
Larkspur; white, lavender, pink; fall-sown; 8 spaces; 2 or 3 plants to space; spring-sown also desirable.

Pansy; white, lavender; in a line 3 inches from edge of bed; replaced by Petunia and Verbena.
Petunia, compact; white, pink; 4 or 5 plants to a space, alternating colors in spaces.
Scabiosa; groups of 10 plants near together; planted around Canterbury Bells.
Silene armeria; encircle Silene and Bluet group with a line of string and stakes.
Snapdragon; white, pink; use if possible $\mathcal{q}$ dozen in bed.
Verbena, var. Francis; pink; in patches, alternating with white Verbena on 2 sides.
Zinnia; pink, tall variety; in Poppy spaces; 9 plants or more in bed. Poppy dies down soon after bloom.
In climate where season is shorter Pansies may be omitted.

## CHART NO. VII

Large Square Open Bed - $20 \times 22$ Feet. Diameter Inner Circle, 3 Feet

center


## PERENNIALS

Chrysanthemum; pink; 4 small plants; 6 inches apart; September-flowering, h. p.; 1 group centre. ANNUALS

|  | Salpiglussis; 5 spaces; 8 plants to space; 40 plants. <br> Scabiosa: sow or plant in line around Campanula persic. to suc- |
| :---: | :---: |
| ene. Later replaced by Chrysanthemums. | Scabiosa; sow or plant in line around Campanula persic. to suc- |
| nula persicifolia; 6 clumps; 4 plants close set to form clump; circle each with Scabiosa plants for later bloom. | lene armeria; line of mixed Silene encircling Bluets. Later |
| erbury Bells: Campanula medium; 3 pink, 2 white. | ts and Sil |
| eliotrope; deep-blue variety preferred; in 10 spaces, alt | Snapdragon; pink and white; 4 or 5 plants. |
| with Petunias; 3 plants to a space set around Tulips to succeed the latter. | Sweet William; palc pink and deep pink; 12 plants, alternating with Tulips. |
| spur, fall-sown; | innia, dwarf rose; 5 or 6 plants; later covering spaces of Larkspur |
| ies; white; line of Pansies close | and Canterbury |
| unia, compact Yariety; pink; set around Sweet. William; 4 | M BULB |
| plants; discarding Sweet William after bloom. | ulip, Cottage; 12 groups; 3 bulls to group; pink and |

## 小च

PLANTS USED IN Chart NO. IX
Left Half of Bed - Total Size of Bed, $31 / 2 \times 18$ Feet

| 芴 | 3 Early Tulins 1 Pansy 3 Early Tulips 1 Pansy 3 Early Tulip Snapdragon Salpiglossis Smandragon Salpiglossis. C.Bell 4 Late Tulihs 1 c.Bell 4 Late Tulihs Ie.Bells |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ¢ | Lupin | Lark- spur | Chrys. Lily | Delpht inium | Lufin | Lark- sfur | Chrys, Lily | Delthr- inium | Lupin |
| $\begin{aligned} & \frac{m}{c} \\ & \frac{3}{2} \\ & \hline \end{aligned}$ | 4 Late Tulips 1 e.Bell 4 LateTulips e.Bell 4 Late Tulip Snapdragon Salpiglossis Snapdragon Salpiglossis 1 Pansy 3 Earles Tulins I Pansy 3 Early Tulins I Pansy |  |  |  |  |  |  |  |  |

## PERENNIALS

plants to a space. Set out July; pink and white; 4 spaces. 3 Sweet William; a few pink plants in any vacancies near outer plants to a space. Set out July l. See Chrys. on chart.
Delphinium belladonna; 3 plants to a bed, centre line. Lilium candidum; 5 or 6 plants in a bed, centre line, in Chrys-
anthernum space.
Lupin poly.; 4 or 5 pla
Tulip, late; in groups of 3 or 4 , alternating with C . Bell in 2 lines either side of centre.
ANNUALS
Canterbury Bell, C. medium; 6 plants on both lines of late Tulips. Salpiglossis; small groups between each Sna Larkspur, fall-sown, var. stock-flowered; as many as will fill spaces Snapdragon; pink and white; on two sides. These and Larkspurs should begin to bloom by July 1. In warm climate second set Zinnia snapdragon may be necessary.
glossis. glossis.
Lupin poly.; 4 or 5 plants, centre line.
Petunia; compact; 4 white plants at either end.
Note.-In warm climate Pansy may be replaced with Diantbus, dwarf Petunia, etc. It would be possible to add a few Gladioli, planted mid-May, near Salpiglossis.
Chart No. X

|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## A SECTION OF THE SCALLOP EDGE FOR A LARGE BED

Ageratum, var. Perfection, blue. Set plants about 8 inches Pansies. Have Pansies in solid colors in alternating scallops.
 early frost.
spreading variety cannot be kept from running beyond the scallops and over the Sweet Alyssum. Petunia can alternate with pink Verbena.
See Chart No. II.

## bed of perennials and bulbs. One-half $91-$ Foot Bed

 PERENNIALS.-Anchusa Italica, Opal; 3 plants to a group. Poppy, Oriental; pink only; 3 small roots close together for a PERENNIALS.-Anchusa Italica, Opal; 3 plants to a group.Anemone Japonica; some pink, some white; 6 plants to a space. Aster, hardy, White Queen; 10 small plants set near together to a space.
Chrysanthemum; 3 plants set 5 inches apart to a space. Delph., Chinense; white, blue; 2 plants in a space. Delphinium, tall variety; 3 plants near centre. Echinops ritro., etc.; 3 plants to a clump.
Eupatorium colest.; 6 plants near together to a space. ANNUAL.-Petunia; white and pink; 2 lines, so that inner Campanula medium, biennial, can be used to fill any vacant
spaces. 1 BULBS.-Dahlia, Cactus; $\boldsymbol{\varepsilon}$ pink, 1 white; use one tiber only Gladoli, America, etc.; one or two plantings, June 1st and Tulip, Darwin, a line encircling Dahlia space, also around Rudbeckia and groups of 3 between Sweet William.

## NOTES PERTAINING TO THE CHARTS

The bed of perennials in Chart XI, on preceding page, is for the purpose of showing the possibilities in such a planting. However, besides the Petunias, this bed has need of such annuals as Campanula medium, Larkspur, Feverfew, and dwarf Zinnia, filling all vacant spaces.

Charts VIII and IX could hold three Feverfew, fall-sown, also June-sown.

Chart IX could contain one Anchusa plant in the centre.
Bear in mind the great value of Larkspur, Feverfew, or Anthemis well distributed over most of the beds.

In the large beds especially there may be need of an increase in the number of annuals called for, in order that any vacant spaces may be filled.

Cut back Delphiniums, Phloxes, and Shasta Daisy to bring later bloom and prevent the annuals from going to seed for the same reason.

For an effective summer planting of annuals in a wall bed similar to the one in Chart II have, instead of scallops, a line of blue Ageratum at the edge. Behind, a line of white and pink compact Petunia. Further back, three closely set lines of garnet and pink Globe Amaranth. At the rear some early Cosmos. Mingled with these annuals may be planted lines or groups of various periods of perennials.

Another attractive finish to the front of a bed is made by a line of annual Dianthus at the edge, with two close-set rows of white and pink Vinca behind.

In the chart lists where the number of plants required is not indicated the gardener may provide enough to fill the spaces.

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[^0]:    * In Chart No. XI, at the end of the book, there is given a suggestion for a bed of perennials, but it is not as satisfactory as where annuals are included, at least when the flowering season is prolonged.

[^1]:    * Pyrethrum, Columbine, Delphinium (tall var.), Oriental Poppy, Platycodon, Statice.

[^2]:    From a photegraph by The Morsis Nmidar

[^3]:    * Heliotrope, Lobelia, Vinca, Impatiens, Torenia, Begonia excepted.

[^4]:    * Lily candidum, will not survive the heavy shading of surrounding plants. Stake adjoining Zinnias and Cleomes.

[^5]:    *In late June, two Chrysanthemums are planted in each Lily space. $\dagger$ Or Salpiglossis.

[^6]:    * In a mild climate it is better to sow Bluets and Larkspurs not earlier than September 1 to 12 to prevent their growing too tall before winter; they are tbus less likely to be broken by snow and ice and more easily transplanted in spring.

[^7]:    * For bloom beginning in April, sow Pansies early in August; for midMay bloom, sow August 30.

[^8]:    *In our uncertain climate these dates are somewhat variable.

[^9]:    Part of curved path. Lower garden

[^10]:    

