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THE SEASONS IN A
FLOWER GARDEN

NOTHING BUT FLOWERS.
A garden in Cornish, New Hampshire.

THE SEASONS IN A FLOWER GARDEN

A HANDBOOK OF INFORMATION AND
INSTRUCTION FOR THE AMATEUR

BY
LOUISE SHELTON

ILLUSTRATED

SECOND EDITION
REVISED AND ENLARGED

CHARLES SCRIBNER'S SONS
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TROW DIRECTORY
PRINTING AND BOOKBINDING COMPANY
NEW YORK

TO
THE MEMORY OF MY LITTLE SPANIEL
“ I D O L ”
FOR TWELVE YEARS MY SHADOW
IN MY GARDEN

INTRODUCTORY

THESE pages are for the most part a condensed record of flower-time—just a little garden wisdom, which may guide others who, unaided by an “experienced man,” do give love-labor to the “green things growing.” They are especially prepared for those who have small gardens where space must be economized in order to welcome the variety of posies that are the heart’s desire.

After some short directions on Plans, Planting, and Soil, the book is arranged in the order of months, beginning with September, for reasons explained later, and giving under each month a few introductory suggestions and a list of its flowering plants, together with practical hints for garden work during that month. After November winter intervenes, and the record begins again with March.

After a little study it should not be too difficult, I hope, for any one to select suitable plants and arrange them in such a way as to make even a small garden show well during the whole season of flowers.

If the eye is trained in the harmony of colors, no fairer castle in the air can be imagined than a garden in its proper color-blending, abloom in every section all through the summer. The setting of plants with regard to height as well as to color adds to the intricacies of this fascinating scheming, which will bring a summer morning into the dreariest of winter days—the time for sketching plans for outdoor planting.

INTRODUCTORY

Following the monthly record there is added some condensed information about Wild Gardens, Shrubs, Vines, Roscs, Seeds, and various important subjects relating to the culture of summer flowers.

In naming flowers I must needs leave unnamed a host of comely plants that help to fill the catalogues. My choice is of those I have tried and found best suited for making a garden on a small scale show well.

L. S.

MORRISTOWN, N. J.

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PART ONE
PREPARATIONS

GARDEN TERMS

Hardy Perennials (*h. p.*).—Plants that withstand the winter in the ground, and are long-lived. They increase in root, and divided roots make new plants. Plants may be also raised from seeds, and will bloom the following season, but rarely sooner. Some *h. p.* seeds may take six months to germinate. Such seeds soaked in water for twenty-four hours and then planted will germinate soon after. Seeds may be sown under glass any time in early spring or out of doors after April 10th.

Hardy Biennials (*h. b.*) may be left in the ground during the winter. They are sown one year, bloom the next year, and die. They should have a light winter protection. The seeds are sown under glass or out of doors in April.

Half Hardy Perennials (*h. h. p.*) and *Half Hardy Biennials* (*h. h. b.*).—They require heavier winter covering, and the seeds are generally started under glass, but can also be started in open ground after May 15th.

Tender Perennials and *Tender Biennials* (*t. p.* and *t. b.*) require more care in starting them. They are sown under glass and are not transplanted to open ground until after May 15th.

Hardy Annuals (*h. a.*).—They can be sown in open ground, some in April, some in May, or in frames in March. They last through certain months of summer and then die. They are perpetuated by their seeds.

Tender Annuals (*t. a.*) require more care. Seeds must be sown under glass. Seedlings must be protected from much sun and cold; they are transplanted from boxes to pots, and set out after May 25th.

Half Hardy Annuals (*h. h. a.*).—Treat as tender annuals, but these can be sown out of doors by June 1st.

To continue the stock, cuttings are sometimes made of both hardy and annual plants.

Mulching plants means to place a layer of grass-cuttings or old leaves, etc., on top of the soil about the plant to keep the ground from drying out.

THE SEASONS IN A FLOWER GARDEN

PART ONE—PREPARATIONS

I

PLANS

SUGGESTIONS TO A BEGINNER

In laying out a garden, begin with a definite plan in drawing. If your aspirations lead you to design a garden too extensive for one year of the garden's allowance, be satisfied with remembering that other years are to follow, and confine the first season's efforts to the planting of the central part of your plan, and gradually work from within outward.

Boundary Line.—Every garden needs a definite boundary line, for the place should be the enclosed retreat of the flower-lover—a place set apart from the rest of the world. The best border is of shrubbery, unless it may be a vine-covered wall.

The Large Garden.—In a large garden all the favorite flowers and many of the shrubs of spring and summer can have their place.

The Small Garden.—In a small garden, where a bright display is desired throughout summertime, most of May's hardy plants, as well as some of summer's large spreading plants, should be omitted, and even June's Pæonies, on account of their size, should be planted elsewhere; they are too beautiful to ignore entirely.

THE SEASONS IN A FLOWER GARDEN

Shrub Bloom for May's Small Garden.—If, for lack of space, May's earliest posies are to be omitted from the main garden-plot, it may still be possible to encompass it with May-blooming shrubs, and to have the smaller May-blooming fruit trees and other dwarf blossoming trees outside, peeping here and there over the shrubbery, loading the air with their fragrance, and suggesting a veritable garden in the air.

GARDEN DIMENSIONS FOR FORMAL PLANS

25 x 30 ft. In order to be more definite, I would suggest that a small garden might measure possibly about 25 x 30 feet, wherein no bed is wider than six feet and the shrub border is not included; instead, a low vine-covered wire fence ($5\frac{1}{2}$ feet) may be the boundary line, but a cheaper and more effective plan is to set cedar posts ten feet apart and six feet above ground. Attach drooping chains or wire between the posts and train Roses, Clematis paniculata, or other vines up the posts and across. The first bloom in this garden is in late May, when Blue Salvia, Columbine, Pyrethrums, Ranunculus, a few German Irises, Lupine, Clove Pinks, Garden Heliotrope, and Pansies come forth in strong contrasts, and help to give the rich coloring to June's garden; the choice of flowers after May being left to the fancy of the gardener.

31 x 36 ft. If possible, add three feet to the width of the outside beds to give room at the back for a few more of such spreading plants as Irises, and for July red Turk's-cap Lily and Hollyhocks, which would be crowded in the smaller garden with the plants already named and the many more to be chosen; or else

PLANS

37 x 42 ft.

add six feet to the outside border of the first plan, to allow for a row of shrubs, if preferred, instead of vines as a boundary line. None of these dimensions yet named are large enough to contain plants like Roses, Dahlias, Sweet Peas, Pæonies, Heliopsis, Golden Glow, Clematis Davidiana, Helianthus, and if annuals are desired it is best also to omit Monarda, Bleeding Heart, Sweet Rocket, Anemone Japonica, hardy fall Chrysanthemums, and to include but few Irises. They would only occupy the space that can be better filled by certain annuals, which are showier and longer flowering.

50 x 60 ft.

A garden of medium size might measure, for instance, 50 x 60 feet, which would give space enough for a shrub border and almost all the popular plants except the earliest May bloomers, Roses, Sweet Peas, and would include a few Dahlias.

70 x 80 ft.

Add ten feet, or more, each way to these last dimensions, and in this garden there would be room for Roses and Dahlias, the Sweet Pea trellis, and all other old-fashioned favorites blooming from May 1st till frost.

The number and variety of annuals to be grown depend upon the space left for them after the perennials are placed.

Except Tulips and Hyacinths, the early hardy bulbs, Daffodils, etc., and Lilies-of-the-Valley are always at their best away from the garden, preferably in the grass, and where their tops need not be cut down until six weeks after flowering. They blossom early under leafless trees, and do not require much sun.

The Plan in Brief.—If the space is not large, I repeat that the main garden should be reserved for the succession of bloom that begins the last week in May and ends with the frost, omitting

THE SEASONS IN A FLOWER GARDEN

some of the too rampant growers of summertime. It should be designed to give the most effective coloring possible in harmonious blending throughout the season, and to give bloom in all parts of the garden at all times.*

It may be several years before satisfactory results are obtained.

WALKS

In some gardens the beds are laid out in well-kept grass, so that the walks are over the green sward; otherwise, pebble paths are made, edged with low Box or Privet, or a narrow border of raised sod. The pebble paths should have a bottom of cracked stones, broken shells, or coal cinders. Few weeds will settle in such a walk.

PLANS FOR IMPROVING A SMALL YARD

In some places where there is not space enough for even a little formal garden, the boundary lines of the property can be softened by shrubbery which will be a congenial background to broad border-beds of hardy plants, interspersed with annuals. Except in the formal garden, the border line of any long flower- or shrub-bed laid out over the turf should be made in curves rather than in a straight line through the grass. The house can be surrounded with shrubs and plants and covered with vines. (See chapters on Vines and Shrubs.) There will be some path, however short, that can be bordered with flower-beds, while all necessary but unsightly objects can be concealed by vines and tall growths of various kinds.

If much is to be expected of a garden, it is very important to have a water hydrant near by.

* Consult garden diagram at the end of the book.

II

PLANTING

WHAT TO PLANT

For a wide bed.—In a broad bed (over twelve feet wide) bordering the garden, plant at the back Clematis and Rose vines or else shrubs three feet or more apart—according to their size—and in front of them, groups or lines of the taller hardy plants—such as Golden Glow, Hollyhocks, Miniature Sunflowers, Physostegia, etc. Then plant the next in height, such as clumps of Achillea Pearl, Late Phlox, Pyrethrum ulig, Delphinium, Foxglove, Oriental Poppies, Day Lilies, Irises, Lupine, Yucca, Veronica, Anemone Japonica, Coreopsis, old-fashioned Valerian, Hyacinthus candicans, etc. Lower plants to be set nearer the front are: Lilies, Platycodon Anthemis, Campanulas, Gaillardia, Sweet William, Early Phlox, Shasta Daisy, June Pyrethrum, Pentstemon, Lychnis, and others of about the same height. The little annuals, such as Portulaca, Sweet Alyssum, Candytuft, Torenia, Ageratum, Stock, Vinca, Lobelia, Phlox Drummondii, Purple Everlastings, and the Pinks, will make a gay finish to the front edge of the border.

Remember that each month of summer should find an array of color throughout the garden, and not on one side in June, and on the other side in July.

Leave ample room among the hardy plants for the host of lovely annuals. Place the plants close enough to allow the foliage to shade the ground space about them, which will prevent the soil from drying out too much.

THE SEASONS IN A FLOWER GARDEN

In Very Small Gardens.—Omit from the beds plants as large or as spreading as hardy Chrysanthemums, Pæonies, hardy Asters, Anemone Japonica, Cannas, Monardas, Cosmos, Sunflowers, Roses (except climbers), Dahlias, Helianthus (*h. p.*), Boconia, Sweet Rocket, Bleeding Heart, Sweet Peas, Clematis Davidiana, Hibiscus, Heliopsis, Scabiosa Caucasica.

Plant more of the hardy plants for late May, June, and early July than for later months, because in limited space the annuals will furnish the most bloom for mid and late summer till frost.

WHEN TO PLANT

At any time when frost is not in the ground the work of laying out a garden into paths and beds can be done.

In the Autumn.—A new garden may be planted in late March, April, or even May, but the results obtained for the first summer are far more satisfactory when the beds are prepared in autumn, when also at least May's and June's hardy flowers had better be planted.

The more work that is accomplished in autumn the more time will there be in spring for sowing and rearing the *annuals*, and for all the other pleasant labor which makes spring the busiest season in the garden. In autumn, finish planting most things, except late bulbs, by October 15th, so that the roots may be well established before frost. Plants set out in autumn must be especially well protected by leaves and brush for the following winter.

In the Spring.—If a garden is to be made in spring, do not plant the hardy flowers for May and June unless it can be done by April 25th, for otherwise some will not bloom that season. Their places can be given to annuals, and the hardys planted the next autumn.

Any time before May 15th the later summer hardy plants

PLANTING

may be set out, and then prepare to fill the spaces with Gladioli, Dahlias, Begonias, and the brightest of the *annuals* that may be put out as late as June 15th. Many annuals can be bought in small plants by the dozen if you have not started them earlier from seeds. The time for sowing these seeds is explained in Part Three of this book.

Early spring is the season for planting Anemone Japonica (in May, when they first appear), hardy Chrysanthemums, fall Tritoma, Althæa, Yucca, and Magnolias, all of which are apt to die the winter succeeding autumn planting.

HOW TO PLANT

In moving plants do not allow the roots to lie exposed to the hot sun or to the cold. Cut off bruised roots.

Always put a good bed of manure, stamped down and covered by four inches of earth, under each hardy plant set out.

In setting a plant do not double up the roots, but spread them out and press some earth gently about them; then fill the hole with water, let it absorb, add the rest of the earth, water again, but *don't depend on soil* that is damp from the rain.

If plants arrive in a wilted condition, soak them in tepid water for an hour at least.

If roots are matted and caked from being pot-bound, loosen the hardened soil by crushing it with the fingers.

Keep new plants well watered, especially if the season is dry.

Plant in groups of several of one kind, if the plant is not very spreading; the number of plants in a group depends upon the size of the plant and the size of the garden. If there is room, have masses of each color.

Plant white and yellow on every side for each period of the flowering season, and place blue or dark red flowers next to white or pale yellow. This arrangement not only adds to the

THE SEASONS IN A FLOWER GARDEN

garden's brightness, but makes the more sombre hues show better.

Plant with a view to having a well-balanced bloom in all parts of the garden continuously.

DATES OF PLANTING DEPENDENT ON CLIMATE

The dates mentioned in this book apply to gardens within sixty miles of New York City. Wherever winters are more severe and set in earlier, the fall planting should begin from one to three weeks earlier, depending on the climate, and in these colder places the spring work is somewhat deferred, and the spring bloom begins later. In very cold localities, and where the ground is stiff and damp and cold, it is often best to prepare the ground in autumn, and to plant as early as possible in spring.

The September page of "Practical Hints for Work" will give the beginner still further instruction in planting.

SELECTION OF FLOWERS FOR A SMALL GARDEN

For a garden not large enough to contain all the flowers listed under each month select at least those marked with italics, they being the most effective ones, as well as the longest in bloom, and add as many more as possible.

THE NAMES OF THE FLOWERS

In the flower-lists to follow the most familiar names are used, whether scientific or common.

III

SOIL

Better begin a garden with one flower-bed properly made than to attempt it with a larger garden in poor soil.

Manure in sandy soil is about as wasteful as burying coins. The next year there is nothing left but the memory of the cost of the fertilizer; therefore if the soil is poor a bed for hardy plants should be made as follows:

Remove the soil and stones to the depth of from eighteen inches to two feet. If the ground is very sandy, spread a thin layer of packed ashes over the bottom, or preferably two inches of light clay; then put in several inches of good soil and broken sod, then several inches of well-rotted manure, more soil, another layer of manure, and finish it off with a top-dressing of fine rich soil. The bottom layer must not exceed two inches.

If the natural soil is clay, mix with it one-fourth part of sand before using it in layers with the manure, and omit the ashes at the bottom. If the natural soil is sandy, some of it may be used by mixing one part of it with three parts of clay before adding the manure and some rich soil.

If the natural soil is good loam, dig it out just the same, in order to remove all stones and to intermix the manure.

A bed for annuals alone need not be enriched for more than one foot in depth.

Drain wet land where a garden is to be made. Occasionally in early spring or autumn sprinkle air-slaked lime around but not on top of the plants. Lime not only sweetens soil, but helps to rid it of insect pests.

PART TWO
THE GARDEN RECORD

MY GARDEN

A garden is a lovesome thing, God wot!
Rose plot,
Fringed pool,
Ferned grot—
The veriest school of peace; and yet the fool
Contends that God is not—
Not God! in gardens! when the eve is cool?
Nay, but I have a sign;
’Tis very sure God walks in mine.

THOMAS EDWARD BROWN.

PART TWO—THE GARDEN RECORD

IV

SEPTEMBER

If you ask why I begin this record of the flower seasons at the end of summer, I will tell you that this is the month of spring-hopes in the gardener's dreamland, the time to plan for the next far away birth-time of flowers, when gardens burst forth in blossom and perfume after the long, deep sleep.

This is also resting-time in the harvest sunshine, a breathing space when the summer's work is done and we revel in the fruits of our labor. The birds, too, no longer toil, but feast and play and murmur in the tree-tops. The bolder ones—Goldfinch, singing on wing his joyous melody of content, and Ruby-Throat Hummingbird—fearlessly invade this domain, revelling in the nectar of every flower, and vying with bumblebees and butterflies in their happy right to everything.

It is mid-September before we need cease our all-day idling in the garden.

PRACTICAL HINTS FOR WORK

PLANTING AND TRANSPLANTING

September 15th.

After the fifteenth there is work to be done in preparation for another summer. In an *established* garden but little can be accomplished within the crowded borders until after a killing frost, but in *new beds* planting is a part of the programme in gardendom until November 1st.

From now until October 15th most of the hardy plants may be moved; *after October 15th* few people care to risk moving

THE SEASONS IN A FLOWER GARDEN

anything but *shrubs* and *trees* and *summer-flowering Lily bulbs*.

The *earlier* it is done the better, in order that the roots may become well established before frost. Hardy perennials and biennials may also be planted in early spring if necessary.

SPECIAL ADVICE ABOUT CERTAIN PLANTS

For safety there are a few rules to be remembered: never move in autumn hardy Chrysanthemums, Anemone Japonica, Yuccas, late Tritomas, Magnolias, and Althæas; wait till April.

The *young* plants of Hollyhocks, Foxglove, Hardy Gailardia, Sweet William, and Clove Pinks should be transplanted by September 20th, otherwise it is unwise to disturb them until early spring; even when older they are not always safely moved much after this date, especially where winters are severe.

In a much-exposed garden, if a cold-frame is available, winter under glass those plants just named above, when they have been started in the seed-bed the past spring or summer. Campanula, Pansies, and Snapdragon, besides, generally require this sort of protection. After November 1st spread about some fine manure, not quite covering them, and give them a light litter of leaves; by December 10th fasten down the glass frame. In weather when the temperature is over 35 degrees above zero, admit some fresh air in daytime.

PLANT MAY AND EARLY JUNE BLOOMERS

To obtain plentiful blossoms the first season, Oriental Poppies and other early bloomers should be moved, if possible, by the fifteenth of September.

Pæonies require, like Roses, the richest, deep soil beneath them, and must be covered by soil only three inches above the crown. They give but one or two flowers the first year after

AN ATTRACTIVE GARDEN PLAN.

SEPTEMBER

being moved. Manure now all old Pæonies, and divide large clumps every six or seven years.

GENERAL WORK

Gather what is left in summer seed-pods if you wish to avoid buying seeds.

Remove dead stalks.

Stake up late-blooming plants.

Transplant Pansies.

Sow grass seed where grass is needed. Sow Silene, Bluets and Larkspur seeds in open ground in early September.

Also sow in the open ground annual Poppy seeds and Forget-me-nots (or sow the latter in August) for another year. Both require some moisture. Poppies need sun, Forget-me-nots need partial shade. The earliest blooming spring bulbs are set out by September 15th, as explained on a later September page.

THE FLOWERS OF SEPTEMBER

FIRST FLOWERING IN SEPTEMBER

September 1st.

	AVERAGE HEIGHT	COLOR	BLOOM	HARDINESS
<i>Pyrethrum uliginosum</i> ...	5 ft.	white	4 wks.	h. p.
Late Aster (annual)	2 "	various	4 "	h. a.
Late Phlox.....	2 "	"	4 "	h. p.
<i>Clematis paniculata</i>	vine	white	4 "	h. p.
Roses, ever-blooming....	2 ft.	various	4 "	t. p.

September 15th.

Hardy Asters.....	2-5 ft.	various	till frost	h. p.
Helianthus Max, etc....	5 "	yellow	" "	h. p.
Delphinium (late bloom)	3 "	various	" "	h. p.
Anemone Japonica (or earlier).....	2 "	white, pink	" "	h. p.
Cosmos (Sept. 25 or later)	6 "	white, pink, red	" "	h. a.

THE SEASONS IN A FLOWER GARDEN

BLOOM CONTINUED FROM PREVIOUS MONTHS

†Gypsophila, †Veronica, †Cardinal Flower, Purple Helichrysum, †Monarda, †Hyacinthus, †Physostegia, †Clematis Davidiana, Scabiosa, Lobelia, early Cosmos, Nicotiana, Portulaca, Sweet Alyssum, Ageratum, Helenium, Stokesia, Larkspur, Calliopsis, Golden Glow, Arctotis, Verbena, Salpiglossis, annual Gaillardia, hardy Gaillardia, Stock, Zinnia, Marigold, annual Chrysanthemum, Petunia, Geranium, Achillea Pearl, Nasturtium, Dianthus, Snapdragon, Coreopsis, Hunnemannia, Canna, Celosia, †Lilies, Salvia, Sunflower, Calendula, †Liatris, Begonia, dwarf Convolvulus, Lavatera, Torenia, Aconitum Nap, Didiscus.

FRAGRANCE

September 5th.

It is a month since some of these blossoms first came into bloom. Most have been flowering even longer, and linger on as if loath to leave an earth so fair. If the season is not too dry, the ripeness of summer gives the fulness of color and vigor to the heavy wealth of flowers nodding now to right and to left as we walk along the garden paths. In the upper part of my terraced garden—at twilight and evening especially—the air even beyond the garden limits is filled with odors of Box and Lilies, mingled with Phlox and fragrant Nicotiana affinis. Down in the lower garden, Stock, Petunia, Phlox, and Clematis paniculata weight the air with fragrance, till I wonder whether the upper or the lower terrace holds the more intoxicating perfumes. Only the bee could tell, for by them is he allured.

COLOR

The color scheme is too extensive a subject for this little volume, and but one late summer garden-bed can be described

† Die early in September.

by way of suggestion: A luxuriant curtain of *Clematis paniculata* clambering high over a ten-foot fence gives a beautiful milky background to a line of alternate groups of crimson plume *Celosias*, tall pink *Hibiscus Moscheutos*, and pink *Physostegias*, the last two offering inviting drinking cups to the honey-sippers. In front of them is a long row of golden *Zinnias*, before which grows a maze of many colored *Asters* and Sweet *Scabiosas*, while the border-front is banded with the little bright-hued *Portulacas* that seem to catch all the light and color afloat in the air where-with to sparkle.

Earlier this bed (ten feet wide) contained the bloom of *Lilium candidum* and *Campanulas*.

To quote another's suggestion:

"A progression of color in a mixed border might begin with strong blues, light and dark, grouped with white and pale yellow, passing on to pink, then to rose color, crimson, and the strongest scarlet, leading to orange and bright yellow. A paler yellow followed by white would distantly connect the warm colors with the lilacs and purples, and a colder white would combine them pleasantly with low-growing plants with cool-colored leaves."

Still another good suggestion for a larger garden is to assign certain colors to different parts of the beds throughout the flowering season. For instance, keep one or more sections for *pink*, beginning with May's pink *Phlox*, pink *Pyrethrum*, and pink *Columbine*, June's pink *Foxglove*, pink *Sweet William*, etc., and so on till October.

It would be almost impossible for a beginner to lay out a garden with an idea of having this color effect at first. He must first become acquainted with the habits and peculiarities of his flowers.

THE SEASONS IN A FLOWER GARDEN

BULBS PLANTED IN SEPTEMBER

LILIES

Lilium candidum, the earliest summer (June) tall Lily, should be planted as near September 10th as possible, because the bulbs, which increase rapidly, make an autumn growth. These lilies require full sun.

Other Lilies are planted about October 25th, or in early spring.

Most Lilies need a light, rich, deep, well drained soil. They do their best where there is some moisture. *Lilium speciosum rubrum* should grow in partial shade; the others must be only somewhat sun-protected by the low foliage of surrounding plants, or mulched with moss, old manure, or leaves, so that the ground will not dry out about them. In planting, it is best to set the Lily bulb in a handful of sand. Manure must not come in contact with bulbs.

Lilium Canadense, *L. superbum*, and *L. tigrinum* will grow almost anywhere.

Plant Lilies in groups of three or six or more, or in a row, about ten inches apart, and set in holes from six to eight inches deep, depending on their size. When Lilies need to be separated it should be done after the stalks have withered.

EARLY SPRING BULBS

Snowdrops, *Chionodoxas*, *Scillas*, *Crocuses*, *Narcissi*, or *Daffodils*, and *Jonquils* do their best growing in the grass or wild garden in partial shade, in rich, deep, stiff, natural soil. *Daffodils* thrive also in the full sun and near water. Plant spring bulbs by September 15th.

Bulbs of a kind must be set at regular depths to come up evenly.

SEPTEMBER

Set Crocuses, Scillas, and Snowdrops three inches apart; Crocuses in holes three inches deep, Scillas and Snowdrops four inches deep. Their tops must not be cut off for at least three weeks after bloom ceases—not until leaves turn yellow.

Narcissi, or Daffodils and Jonquils in grass must grow only where the grass can be left undisturbed by the scythe until June 25th. Daffodils are planted six or seven inches deep, Jonquils five inches deep, and ten inches apart.

Tulips and Hyacinths, following Daffodils in the spring procession, are not planted until October.

For Lilies-of-the-Valley, see Practical Hints for October and June.

All bulbs will increase in number if their tops are left undisturbed until they are yellow, when they are ripened.

TABLE FOR BULB-PLANTING

Lilies, three times depth of bulb					
(large bulbs).....	7-8 inches deep.		10 inches apart.		
Lilies (small bulbs)	6	"	10	"	"
Daffodils	7	"	10	"	"
Hyacinths.....	7	"	5	"	"
Tulips.....	6	"	5	"	"
Jonquils.....	5	"	6	"	"
Chionodoxas.....	5	"	6	"	"
Crocuses.....	3	"	3	"	"
Scillas.....	4	"	3	"	"
Snowdrops.....	4	"	3	"	"
Anemones.....	3	"	6	"	"

It was a day that sent into the heart
A summer feeling; even the insect swarms
From their dark nooks and coverts issued forth,
To sport thro' one day of existence more;
The solitary primrose on the bank
Seem'd as though now it had no cause to mourn
Its bleak autumnal birth, while it partook
The universal blessing.

SOUTHEY.

V

OCTOBER

Summer is at rest by the first of this month, and though some of its color lingers still, it is a matter of only a few days before the change which heralds winter's approach will wipe out every plant but Marigolds and hardy Chrysanthemums.

Providing the season has not been too dry, the September flowers are with us still, and even August loans some garden favorites. October's airy, dainty "Daisies," the pink, white, and red Cosmos, are now waving their glory in the face of the coming frost, and the wax-like Anemone Japonica, far too beautiful to meet an early death, is another precious blossom gathered hurriedly for the flower-bowls indoors.

By October 10th the first breath of King Frost has swept the garden and taken from it all the color and fragrance that had lingered on so long. Nothing remains there; but outside, the Garden of Trees, in robes of gold and crimson, will give us a color feast for yet awhile.

There are rare warm days ahead, although few, and a period at the end of the month when the hardy Chrysanthemums blossom forth in autumn tints to thrive gayly even with snowflakes on their sturdy petals, but with them ends this month of change, closing the flower season.

PRACTICAL HINTS FOR WORK

TENDER PLANTS

October 1st.

Take into the house all tender plants, Geraniums, etc., that are to be saved from the frost for house culture. Geraniums

THE SEASONS IN A FLOWER GARDEN

should be hung, free from soil, in a moderate temperature until spring, when they are cut back and planted again.

Before hard frost, also, the tuberous Begonias should be lifted, dried, and stored in the cellar in a box of coal ashes or sand, and out of danger from the frost.

HARDY PLANTS

Dig up and divide the roots of plants that are too large; reset them in fresh soil and add manure. This is necessary every three or four years in order to produce better flowers; finish transplanting by October 15th, if possible.

Shrubs are the exception, as they can be moved after the leaves begin to fall (or in early spring).

BULBS

Tulips and Hyacinths should be planted between the first and the fifteenth. If the flower-beds where they are to go have been occupied all summer, well-rotted cow manure should be dug in a foot deep, with care not to disturb the roots of hardy plants or to let manure come in contact with the bulbs.

These bulbs require light, rich soil, and sun. The earth should not be pressed too closely over them. Bulbs of a kind must be set at regular depths, or else they will come up unevenly. Set them five inches apart, Tulips in six inch holes, Hyacinths in seven inch holes.

Many Tulips can be left in the ground, preferably in the grass near the Daffodils, and if undisturbed they will increase where the soil is favorable to them. *Tops must not be cut down or bulbs moved until leaves begin to fade.*

October 15th.

GENERAL WORK

After the killing frost the garden must be clean swept.

Take up bulbs of Dahlias, Gladioli, and Cannas, and as

OCTOBER

soon as they are dry place them in boxes or barrels in a moderate, even temperature.

Label unmarked plants on deep-driven stakes. Burn the light chaff, and keep the stalks of taller plants for covering the beds in late November.

Gather the remaining seeds for keepsakes, to renew the garden favorites.

If not already done, dig manure in around the plants that make an early start—Pæonies, Phlox, Iris, Bleeding Heart, Columbine, Valerian, Hollyhocks, etc.

Plant Lilies-of-the-Valley in deep, stiff, rich soil, each pip one inch apart and three inches deep.

Plant bulbs of *Lilium speciosum*, *L. auratum*, etc., now or about March 25th.

THE FLOWERS OF OCTOBER

FIRST FLOWERING IN OCTOBER

	AVERAGE HEIGHT	COLOR	BLOOM	HARDI- NESS
Cosmos (sometimes earlier).	5 ft.	red, wh., pk.	till frost	h. a.
Aconitum Fischeri " "	2 "	blue	" "	h. p.
Tritoma Uvaria grand	3 "	red	" "	h. h. p.
Chrysanthemum, late Oct. or Nov. 1st	2 "	various	" "	h. p.

BLOOM CONTINUED FROM PREVIOUS MONTHS

Asters, Stock, Petunia, Salvia, Dahlia, annual Sunflower, Helichrysum, Zinnia, Anemone Japonica, Scabiosa, Arctotis, Nicotiana, Gaillardias, Dianthus, Nasturtium, Canna, Celosia, Portulaca, Snapdragon, Sweet Alyssum, Ageratum, Coreopsis, Convolvulus (dwarf), Hunnemannia, Helianthus, Helenium, Marigold, Calendula, Larkspur, Achillea Pearl, Roses, Didiscus.

Die to the root, sweet flower,
If so God wills, die even to the root;
Live there awhile, an uncomplaining mute,
Blank life, with darkness wrapp'd about thy head,
And fear not for the silence round thee spread.
This is no grave, though thou among the dead
Art counted, but the Hiding-place of Power.
Die to the root, sweet flower

ANON.

VI

NOVEMBER

The garden has gone to sleep! Six weeks ago the birds ceased to sing over it, and since that signal the flowers have been slipping away to dreamland, and even the warm breath of Indian summer's sunshine cannot tempt them above ground. In the first week of this month a snow-flurry played over the heads of the lonely Chrysanthemums, but they bowed serenely and tossed their brilliant colors bravely until they were ready to go.

In Indian summer the garden is a lonesome place. Chrysanthemums are passed, and the earth and trees are laid bare; yellow haze and summer-like air hover silently over empty borders.

November's garden work is chiefly for protection against cold, until December places the final covering over the sleepers—a white, downy counterpane of snow. All is at rest, and not to be aroused until springtime, with the first call of meadow-lark and robin.

PRACTICAL HINTS FOR WORK

COVERING

Late November is the time for covering the garden.

About the *fifteenth*, six or eight inches of manure may be laid over the hardy bed to good advantage, and about the *twenty-fifth*, a light layer of leaves, kept in place by plenty of stalks or boughs, should be spread on top.

THE SEASONS IN A FLOWER GARDEN

The *tender plants*, however, such as tender Roses, need the manure and a *deeper covering* (nearly three feet) of leaves or straw.

Too many leaves are injurious to certain plants, seeming to sweat and to rot them. Plants are covered, not so much to keep the cold out of the ground as to prevent the too frequent thawing and cracking of the ground in the warmer days, which injures the roots and bulbs. Even extreme cold affects but few of the hardy perennials if they are lightly covered.

Foxgloves, Sweet Williams, Clove Pinks, and Yuccas should not be covered over completely. They seem to need some fresh air.

If the garden holds an *exposed position*, Althæas are better for a light covering above the roots, and the Crimson Ramblers, which are sometimes killed by exposure to severe cold, can be strapped to the ground and covered. In most gardens it is unnecessary, as Ramblers are naturally hardy.

Do not cover too early, or the litter may become an abode for mice. Cover only after the ground has frozen solid.

SPRAYING

Spray fruit trees, etc., affected with scale.

THE FLOWERS OF NOVEMBER

	HEIGHT	COLOR	BLOOM	
Chrysanthemums.	3 ft.	various	3 weeks	hardy

Chrysanthemums, Pomponé.—This variety blooms the last of October. It may be found at any dealer's. The flowers are smaller than those of the other variety.

Chrysanthemums, the Old-fashioned.—This variety, often seen growing against old farm-houses, in colors of white, gold, deep rose, or rich red, is more difficult to secure.

MID-WINTER

UNDER THE SNOW

It is pleasant to think, just under the snow,
That stretches so bleak and blank and cold,
Are beauty and warmth that we cannot know,—
Green fields and leaves and blossoms of gold.

Yes, under this frozen and dumb expanse,
Ungladdened by bee or bird or flower,
A world where the leaping fountains glance,
And the buds expand, is waiting its hour.

And often now when the skies are wild,
And hoarse and sullen the night winds blow,
And lanes and hollows with drifts are piled,
I think of the violets under the snow;

I look in the wild-flower's tremulous eye,
I hear the chirp of the ground bird brown;
A breath from the budding grove steals by,
And the swallows are dipping above the town.

So there, from the outer sense concealed,
It lies, shut in by a veil of snow;
But there, to the inward eye revealed,
Are boughs that blossom, and flowers that glow.

The lily shines on its bending stem,
The crocus opens its April gold,
And the rose up-tosses its diadem
Against the floor of the winter's cold.

T. HEMPSTEAD.

All nature seems at work. Slugs leave their lair;
The bees are stirring—birds are on the wing,
And Winter, slumbering in the open air,
Wears on his smiling face a dream of Spring.

COLERIDGE.

First came the forward darlings of the Spring;
Snowdrops, and violets, and daisies white,
The year's faint smiles before its burst of mirth,
The soft sweet-breathing babies of the earth.

FRANCES A. KEMBLE.

VII

MARCH

Spring is in the air! The birds and zephyrs proclaim it, and down in the woods there are signs of the spirit of life astir in the underground dreamers.

The tiny heralds of spring—Snowdrops, Chionodoxas, Crocuses, and Scillas—arrive in March and are the advance guard of the floral procession, strewing the way with waxen buds, and bringing welcome tidings of the flower-train to follow. Robins, song sparrows, bluebirds, and meadowlarks sound the bugle-notes over these early messengers, and the gardener is about again, glimpsing below and above for signs of renewed life.

PRACTICAL HINTS FOR WORK

BEFORE FROST IS OUT OF THE GROUND

March 1st.

In February and March, trees and shrubs and vines affected by scale should be sprayed.

A tree may be moved when the frost is in the ground and the roots are "balled," or it may be moved later, preferably just before budding.

Manure shrubs, vines, and grass.

Pruning.—Cut off limbs of fruit trees where such pruning is necessary.

Prune hardy Roses early.

Prune considerably *Hydrangea paniculata*, but with *all other shrubs* remove only the dead wood, and cut back overgrown

THE SEASONS IN A FLOWER GARDEN

shoots to preserve the proper form of the bushes, without actually pruning them at this season.

Seeds.—As soon as possible sow seeds *under glass* or in *window-boxes*, and watch these seedlings closely. Do not allow them to be chilled or to dry out; neither should they be too much soaked or they will “damp off.” (See chapter on The Seed-bed.)

AFTER FROST IS OUT OF THE GROUND

March 15th.

As soon as the frost is out of the ground plant Sweet Peas five inches deep.

Grass seeds may be sown, and sod rolled.

Sow the seeds of Annual Poppies and *Silene Pendula*, if not done in the early autumn, which is the best time.

Shrubs and Roses.—Move *Magnolias* and *Althæas*; also Box and Privet for hedges; other shrubs, small trees and vines, may all be moved now or later.

Hardy Roses may be partially uncovered. They can be planted by March 25th, and every year they should be cut back to within one and one-half feet (or less) of the ground. (See chapter on Roses.)

General Work.—Begin to clean up.

New garden-beds may be made.

Gradually lift the heaviest part of the covering from the hardy plants. At the end of the month *Pæonies*, *Irises*, *Fox-gloves*, *Oriental Poppies*, *Valerian*, *Phloxes*, etc., should be freed from all litter, unless it is unseasonably cold.

THE FLOWERS OF MARCH

	HEIGHT	COLORS	HARDINESS
Snowdrops.....	4 inches	white	hardy bulbs
Chionodoxas.....	4 “	blue	“ “
Crocuses	4 “	various	“ “
Scillas.....	6 “	“	“ “

The First Wild Flowers.

A BOX-EDGED GARDEN.

I wandered lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host of golden daffodils;
Beside the lake, beneath the trees,
Fluttering and dancing on the breeze.
Continuous as the stars that shine
And twinkle on the milky way,
They stretched in never-ending line
Along the margin of a bay;
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.
WORDSWORTH.

VIII

APRIL

Color and life are fast returning to the Willows and Red Maples.

Misty green and hazy yellow tinge the landscape. Many of the wood-plants are up, and in the garden by April 1st Pæonies are pushing through the soil.

It is the month of Daffodils, and through their rapid increase their number is redoubled each year. Early Tulips, too, are here on the 15th.

Animal life abounds toward the end of the month, and the garden's best friends, birds, bees, toads, and butterflies, almost as welcome and needful to plant-life as sunshine and rain, busily share our interest in the green things. Frogs are piping by the stream, early birds are mating, and the love-song begins.

PRACTICAL HINTS FOR WORK

April 1st.

If frost is out of the ground, remove all litter from hardy beds and from Pansies.

Finish spraying affected trees, shrubs, and vines.

If Rose plants and vines have scaly crust on them, rub them carefully with a sponge or fine brush dipped in a weak solution of kerosene emulsion, before they have shown sign of buds.

Finish neglected March work.

Manure shrubs and vines every other year. In alternate years dig in old leaves early about them, or if economy is unnecessary, give manure annually.

THE SEASONS IN A FLOWER GARDEN

Finish moving hardy Roses, and manure all Roses by April 1st, if possible.

Buy new hardy biennials and perennials early this month. The later they are moved the fewer flowers they will yield the same season. Keep the newly planted late May and early June varieties damp if you want blossoms the coming months, and even then some will not bloom till another year.

Prune grape-vines early. Prune back the tender Roses to a height of one foot, and uncover them.

SEEDS SOWN

Finish sowing *seeds of annuals under glass*.

Certain *hardy annuals* may be sown in the *open ground* by the 15th, e. g., Cornflowers, Candytufts, Sunflowers, etc. (Read the chapter on Seeds of Annuals.) Prepare the ground for seeds by enriching and pulverizing the soil.

April 15th.

Sow *hardy perennial seeds* in the *open ground* if they were not sown earlier under glass; or sow them in July or August.

Not later than April sow Hollyhocks (h. p.), Foxgloves, (h. p.), Campanula (h. b.), and other biennial seeds. They will not bloom until next year. When sown as late as July or August perennials and biennials will make only small plants for the next season.

PLANTING

Set out Pansy plants from the frame-bed or greenhouse.

Dig deep, turning in the manure with the soil where all hardy plants are up, but beware lest, digging near the invisible things, something is killed underground.

After hardy perennial shoots are a few inches high, trans-

APRIL

plant and divide roots where necessary, if it was not done in the autumn.

Two tablespoonfuls of fine bone-meal or wood ashes stirred in lightly around each of the plants will improve their flowers.

Transplant tender Roses.

Continue planting hardy flowers.

SPRAYING

Spray Roses when the first small leaves appear with whale-oil soap or kerosene emulsion. Do not apply these too strong.

Spray with Bordeaux mixture the plants that have a tendency to rust or mildew—Hollyhocks, Phlox, Delphinium, and Aconitum are sometimes affected; if previously diseased spray before the first signs of the trouble appear, and dig in a little dry Bordeaux around the crown of the plant.

SEED-BED

All this month carefully tend the seedlings started under glass, and transplant them at the proper time. Further instructions on this subject are to be found in the chapter on The Seed-bed.

THE FLOWERS OF APRIL

FLOWERING IN APRIL

	HEIGHT	COLOR	BLOOM	HARDI- NESS
Tulips.....	12 inches	various	4 wks.	hardy bulbs
Daffodils (Narcissi)	12 "	wh., yellow	4 "	"
Jonquils (Narcissi).	10 "	yellow	4 "	"
Hyacinths.....	10 "	various	4 "	"
Pansies.....	8 "	"	12 "	h. a.

Wild Flowers

MAY

And the Spring arose on the garden fair,
Like the Spirit of Love felt every where:
And each flower and herb on Earth's dark breast
Rose from the dreams of its wintry rest.

.
And the sinuous paths of lawn and of moss,
Which led through the garden along and across,
Some open at once to the sun and the breeze,
Some lost among bowers of blossoming trees,

Were all paved with daisies and delicate bells
As fair as the fabulous asphodels,
And flowrets which drooping as day drooped too
Fell into pavilions, white, purple, and blue,
To roof the glow-worm from the evening dew.

SHELLEY.

IX

MAY

In early May, for a fortnight, blossoms are overhead.

Cherry-bloom is passing, covering the ground with snow-flakes; Apple-blossoms are opening, and the green landscape is wreathed in its snowy fruit trees. It is the bumblebees' season of revelry, when thousands of them hover amid the blossoms in a grand droning chorus, and sip from perfumed chalices.

May is also the time of fairest shrubs and of bird-song, but not until the end of the month is the gardener's dream realized in the first burst of radiant bloom in the hardy beds.

PRACTICAL HINTS FOR WORK

May 1st.

Some gardens bloom earlier than others, depending on soil and location.

TREATMENT OF HARDY PLANTS

Probably by May 1st, in the vicinity of New York, all the hardy plants but *Anemone Japonica* are above ground; and if this is the case, finish digging in the winter's covering of manure. It need never be wasted, and if necessary to rake off some of it, keep it for mulching Lilies, etc. The best of its value as a fertilizer is gone.

Transplanting of hardy plants may still be done (until the fifteenth) if the holes are soaked and the plants afterward kept

THE SEASONS IN A FLOWER GARDEN

watered. *Spring-planted* summer-blooming things will probably not flower as well the first season as those that were *autumn-planted*.

If the season is dry, soak thoroughly, and mulch with grass-cuttings or old leaves, etc., the Sweet Peas, Lilies, and Pentstemons. Water other plants too. Slight sprinkling is useless; the ground must be soaked, and not earlier than 4 P.M., so that the sun will not prevent the plants from getting the full benefit of the wetting.

The bulbs of Dahlias, Cannas, and Gladioli may be set out by May 1st, or as late as July 1st; except in the case of Cannas, the somewhat later planting is preferable.

PESTS

May 15th.

If rust or mildew has appeared on anything, spray with Bordeaux mixture every other week till July. Dig in a little dry Bordeaux around the *crown of the plant*.

If Roses are threatened treat them weekly with insecticides. One class of pests succumb to oily applications, another class to arsenical poisons. (See chapter on Roses.)

Look for signs of cutworms in withering, drooping stalks. The worm is generally found a half-inch under soil, near or at the base of a stalk. Kill it and surround the plants with the powdered ashes of range coal, or use a solution of one ounce of saltpetre to one gallon of water, sprinkled about the base of the plants.

THE SOIL FOR ANNUALS

Prepare in rich earth the beds for the annuals. Dig deep, turning under the top soil; then cover the bed with a layer of manure, and dig that under not too deeply. Make the top of the bed smooth with pulverized soil, and if the earth is not rich

MAY

enough sprinkle the top of it with sheep's manure; turn it under lightly, water it well, and the bed is *ready for seeds* or *for small plants*.

TRANSPLANTING YOUNG PLANTS

Toward the last of the month transplant the hardier annuals from the seed-beds to permanent positions.

If there are perennials in the seed-beds which are too young to flower until another year, keep them there with the young biennials until autumn or the following spring, or else they may be smothered in the crowded border of larger plants.

THE FLOWERS OF MAY

FIRST FLOWERING IN MAY

<i>May 1st.</i>	AVERAGE HEIGHT	COLOR	BLOOM	HARDI- NESS
Phlox subulata.....	4 in.	white, pink	3 wks.	h. p.
Bellis perennis (English Daisy).....	6 "	white, pink	4 "	h. p.
Doronicum.....	1½ ft.	yellow	4 "	h. p.
Saxifraga cordifolia.....	1 "	pink	4 "	h. p.
Saxifraga pyramidalis....	2 "	white	2 "	h. p.
Saxifraga ligulata.....	1 "	"	4 "	h. p.
Anemone coronaria.....	6 in.-1 ft.	white, purple	5 "	h. p.
Anemone apennina.....	4-9 in.	blue, white	5 "	h. p.
Lindelofia.....	2 ft.	blue	4 "	h. p.
Anthericum.....	2 "	white	6 "	h. p.
Bluebell (Mertensia)	1½ "	blue	6 "	h. p.
Late Tulip and Hya- cinth	1 "	various	3 "	h. p.
Lily-of-the-Valley (outside of garden).....	8 in.	white	3 "	h. p.
Lychnis Haageana.....	1 ft.	scarlet	4 "	h. p.
Pentstemon grandiflorum	2 "	blue	6 "	h. p.
Sweet Rocket.....	1½ "	lilac	4 "	h. p.
Bleeding Heart.....	2 "	pink	5 "	h. p.

THE SEASONS IN A FLOWER GARDEN

FIRST FLOWERING IN MAY

May 15th.	AVERAGE HEIGHT	COLOR	BLOOM	HARDI- NESS
<i>Phlox Carolina</i>	1 ft.	rosy red	5 wks.	h. p.
<i>German Iris</i>	2 "	various	4 "	h. p.
<i>Columbine</i>	3 "	"	6 "	h. p.
<i>Ranunculus aconitifolius</i> fl. pl.	2 "	white	6 "	h. p.
<i>Ranunculus acris</i> fl. pl. ...	2 "	yellow	6 "	h. p.
<i>Pæony officinalis</i> (early variety)	2½ "	deep red	3 "	h. p.
<i>Valerian</i> (or <i>Old-fashioned</i> <i>Garden Heliotrope</i>)	4 "	white	4 "	h. p.
<i>Salvia pratensis</i>	2 "	blue	4 "	h. p.
Flags (outside of garden)	2 "	purple	3 "	h. p.
<i>Pyrethrum</i>	2 "	various	5 "	h. p.
<i>Silene pendula</i>	1½ "	white, red, pink	4 "	h. a.
<i>Lupinus polyphyllus</i>	2-3 "	various	4 "	h. p.
<i>Myrtle</i>	creeper	blue	4 "	h. p.
<i>Lemon Lily</i> (<i>Hemerocallis</i>)	1½ ft.	yellow	4 "	h. p.
<i>Clove Pinks</i>	10 in.	white, pink	4 "	h. p.
<i>Achillea tomentosa</i>	1 ft.	yellow	4 "	h. p.
<i>Primroses</i>	1 "	various	4 "	h. p.

BLOOM CONTINUED FROM PREVIOUS MONTH

Daffodils, Pansies, Violets, Tulips, Jonquils, Hyacinths.

Soon will the high Midsummer pomps come on,
 Soon will the musk carnations break and swell,
Soon shall we have gold-dusted snapdragon;
 Sweet-William with his homely cottage-smell,
And stocks in fragrant blow;
 Roses that down the alleys shine afar,
And open, jasmine-muffled lattices,
And groups under the dreaming garden-trees,
 And the full moon and the white evening-star.
 MATTHEW ARNOLD.

X

JUNE

June is the queen of all the months. May's later blossoms linger to bloom in the June garden near the choicest flowers of summer and through the longest and fairest days of the year.

Perfumes that are only June's commingle and follow the winds even through open windows, coming as fragrant messengers from Roses, Honeysuckle, Clove Pinks, and old-time Garden Heliotrope.

June brings the Roses' rivals too, deep, ardent Pæonies, and,

“Here are Sweet Peas on tiptoe for a flight,
With wings of gentle flush o'er delicate white,
And taper fingers catching at all things,
To bind them all about with tiny rings.”

PRACTICAL HINTS FOR WORK

LATE-SOWN SEEDS

June 1st.

Sow seeds of *Portulaca* out of doors; sow also *Salvia* if it has not been started earlier under glass, which is the better way. These are the last annuals to be sown.

PLANTING OUT

Finish transplanting from cold-frame or hot-bed or window boxes, and, if possible, do this when the ground is rain-soaked and the weather cloudy.

THE SEASONS IN A FLOWER GARDEN

Bedding-out plants—tender annuals like tuberous-rooted Begonias, Geraniums, Heliotrope, and Fuchsias are all set out now, or by June 15th at the latest. Transplanting time is supposed to be over for these plants, but they may be moved later if they are watered and shaded for a few days afterwards.

STAKING, PINCHING BACK, ETC.

Staking is important for the plants liable to be blown over and broken by high winds. Golden Glow needs six-foot stakes.

By June 1st, if not sooner, Sweet Peas need the brush or wire trellis.

Strings must not be tied too tight about branches of any plants.

Pinch off the tops of hardy Chrysanthemums, Dahlias, Salvia, Cosmos, and Zinnias, to make them bushy. (See chapter Notes on Popular Plants.)

Weed the beds, and loosen the soil with a hoe.

Water shallow-rooted plants in drought, especially annuals.

SPRAYING

Watch for signs of destructive insects and diseases, and do not let them get ahead of you.

If you cannot account for a plant's bad condition, spray it with Bordeaux mixture, and a few days later spray it with tobacco water. Repeat this treatment the following week.

Spray Roses as directed in chapter on Roses.

GENERAL WORK

June 15th.

Allow but few flowers to form seed-pods if continued bloom is desired.

Bring Tulip and Hyacinth bulbs into the cellar.

JUNE

Dig in lightly some wood ashes around Asters and hardy Chrysanthemums.

The Daffodil bulbs have now ripened, and their foliage with the grass over them may be cut by June 25th.

Enrich Lily-of-the-Valley bed if the bloom was not satisfactory. Keep it weeded, and if in a semi-sunny position and not thickly grown, mulch the bed with grass cuttings.

Thin out the young plants that have come up too thickly from seeds sown out doors, i. e., Petunia, Candytuft, Portulaca, etc.

To keep moisture about the roots of plants, continue to loosen the top soil frequently

PRUNING

Prune shrubs that have finished blooming, but only as much as they require it. If a shrub has foliage only at the top, prune it back severely, otherwise cut out only dead wood, and cut off the small end branches that have borne the blossoms; remove also over-crowding branches, and cut back one-third of each of those new shoots that have grown too long. Cut out suckers which take the strength from branches that would otherwise bloom freely.

Read books on pruning.

THE FLOWERS OF JUNE

FIRST FLOWERING IN JUNE

<i>June 1st.</i>	AVERAGE HEIGHT	COLOR	BLOOM	HARDI- NESS
Forget-me-not.....	8 in.	blue	4 wks.	h. p.
Pæonies.....	3 ft.	various	3 "	"
Roses (all).....	1-6 "	"	4 "	h.p.-t.p.
Oriental Poppies.....	3 "	red, pink, white	3 "	h. p.
Forget-me-not (treat as h. b.)..	3 "	various	5 "	"

THE SEASONS IN A FLOWER GARDEN

FIRST FLOWERING IN JUNE

<i>June 1st.</i>	AVERAGE HEIGHT	COLOR	BLOOM	HARDI- NESS
<i>Sweet William</i>	1½ ft.	various	5 wks.	h. p.
<i>Valerian</i> , new variety....	2 "	white, pink	5 "	"
<i>Lilium candidum</i>	3 "	white	4 "	"
<i>Campanula</i>	2 "	blue, wh., pk.	8 "	h. b.
<i>Delphinium</i>	3 "	blue, white, etc.	*	h. p.
<i>Sweet Sultan</i>	2 "	various	8 "	h. a.
<i>Cornflowers</i>	2 "	"	8 "	h. a.
<i>Lychnis Viscaria</i>	1 "	deep red	4 "	h. p.
<i>Lychnis chalcedonica</i> fl. pl., etc	3 "	red, white, pink	6 "	"
<i>Lychnis dioica rosea</i>	1½ "	pink	4 "	"
<i>Pentstemon diffusus</i>	2 "	blue	8 "	"
<i>Pentstemon Digitalis</i>	2 "	bluish white	8 "	"
<i>Pentstemon barbatus</i> tor..	3 "	red	8 "	"
<i>Japanese Iris</i>	2-3 "	various	4 "	"
<i>Shasta Daisy</i>	1½ "	white	4 "	"
<i>Gaillardia</i>	2 "	yellow, red	*	"
<i>June 15th.</i>				
<i>Coreopsis lanceolata</i> gran- diflora	2½ "	yellow	*	h. p.
<i>Dianthus Pinks</i>	1 "	various	*	h. b.
<i>Annual Poppies</i>	1½ "	"	2 "	h. a.
<i>Yucca</i>	3 "	white	4 "	h. p.
<i>Phlox suffruticosa</i>	2 "	white, etc.	4 "	"
<i>Achillea Pearl</i>	2 "	white	*	"
<i>Anthemis</i>	1½ "	yellow	8 "	"
<i>Sweet Peas</i>	5 "	various	10 "	h. a.
<i>Petunias fringed</i>	1 "	"	*	"
<i>Petunias common</i>		white	*	h. h. a.
<i>Geraniums</i>	1 "	red, white, pink	*	t. a.
<i>Snapdragon</i> (treat as h. a.)	1½ "	various	*	h. h. p.
<i>Spirea Chinensis</i> , etc....	2-4 "	white, pink	3 "	h. p.
<i>Agrostemma coronaria</i> ..	2 "	pink, red, white	8 "	"
<i>Feverfew, double</i>	1½ "	white	10 "	"
<i>Jacob's Ladder</i>	1 "	blue, white	8 "	"
<i>Crimson Rambler Rose</i> , climbing vine		crimson	5 "	"

The sign * means blooms till frost.

JUNE

BLOOM CONTINUED FROM PREVIOUS MONTH FOR SEVERAL
WEEKS

Pyrethrum, Lemon Lily, Ranunculus, Garden Heliotrope,
Clove Pinks, Columbine, Pansies, Flags, German Iris, Lupine,
Blue Salvia, Silene, Lychnis Haageana.

Heavy with sunshine droops the golden-rod,
And the red pennons of the cardinal flowers
Hang motionless upon their upright staves.
The sky is hot and hazy, and the wind,
Wing-weary with its long flight from the south,
Unfelt:

Through the open door
A drowsy smell of flowers—gray heliotrope,
And white sweet clover, and shy mignonette—
Comes faintly in, and silent chorus lends
To the pervading symphony of peace.

WHITTIER.

XI

JULY

Midsummer's carnival of flowers is celebrated by the arrival of the annuals in bloom. They crowd into every crack and cranny assigned them, to bloom and bloom and bloom till frost. Their long sojourn in the garden makes up for the fact that none of them can compete in beauty with perennials such as Roses, Pæonies, Irises, and Fox-gloves—the advance guard of June—but the annuals will fill the borders with color and fragrance for many weeks to come.

July with her annuals and fewer perennials is ushered in by the tall Hollyhocks, as dear to the heart of the simplest countrywoman in her quaint garden as to the eye of the artist. Was ever a garden painted without them? They are the half-way signs in the garden calendar, standing midway between the time when Nature begins to stir in March and when the sap ceases to flow in autumn. They mark the beginning, too, of a respite from our pleasant toil—a leisure time gained after untiring ministrations to all these responsive spirits of the soil.

Between July 15th and September 10th there is comparatively little work to do, except weeding, hoeing, and possibly watering, and we may gather more blossoms than ever, to send to some of the stifled and weary folk whose evening rest cannot be found in the cool of a garden.

THE SEASONS IN A FLOWER GARDEN

PRACTICAL HINTS FOR WORK

STAKING, WATERING, WEEDING, HOEING

July 1st.

Finish staking plants that are inclined to blow over or to grow crooked.

Water plants and shrubs if there is a drought.

Weed and *hoe* the ground around plants and shrubs to conserve the moisture underneath, and thus avoid frequent watering.

If roots are near the surface, use the fingers to loosen soil (e. g., Phlox).

MIDSUMMER-SOWN HARDY SEEDS

The seed-bed is now empty, and the soil may be replaced or thoroughly enriched in order that *hardy perennial* seeds may be sown after July 15th, if it could not have been done in spring.

Hollyhocks and Foxgloves, treated as biennials, Campanulas, and other biennials, should always be sown earlier.

Read chapter on Seeds of Hardy Plants for further information regarding them.

TREATMENT OF ANNUALS

Trim back the overgrown Pansies, and give them some fertilizer.

Finish *thinning out* where annual plants have come up from seeds sown late in the open ground.

If any of the annuals look weak and ill nourished, dig in lightly around them wood ashes, or sheep's manure, or a mixture of both.

July 15th.

For continued bloom of Sweet Peas give a treatment of liquid manure. Soak the ground thoroughly and mulch it.

JULY

If *Dahlias* are not growing in the best of soil, give them a similar treatment, and if thickly grown with leaves and having few buds, remove some of their lower branches. In a moist climate and congenial soil *Dahlias* need no such care.

PRUNING

By the fifth, prune back by a few eyes the *Rose-bushes* that have finished blooming for the present and will bear later buds. Give treatment as required in chapter on *Roses*.

Cut off all fading flowers in the garden to encourage further blooming.

Remove and burn any dead stalks and dead leaves on plants or shrubs.

GENERAL WORK

Continue to train the extending vines that require it.

Give treatment of weak kerosene emulsion to shrubs and fruit trees if affected with scale.

THE FLOWERS OF JULY

FIRST FLOWERING IN JULY

<i>July 1st.</i>	AVERAGE HEIGHT	COLOR	BLOOM	HARDI- NESS
<i>Hollyhocks</i> (sometimes earlier).....	5 ft.	various	6 wks.	h. p.
<i>Pentstemon ovatus</i>	2 "	purple	8 "	"
<i>Platycodon</i>	1½ "	blue, white	6 "	"
<i>Stokesia cyanea</i>	2 "	blue	10 "	"
<i>Monarda</i>	3 "	red	8 "	"
<i>Hemerocallis fulva</i> (Day Lily).....	3 "	orange	4 "	"
<i>Liatris</i>	3 "	rosy purple	8 "	"
California Poppy.....	1 "	yellow, etc.	8 "	h. a.
<i>Gladiolus</i> (bulb).....	1½ "	various	4 "	tender

THE SEASONS IN A FLOWER GARDEN

FIRST FLOWERING IN JULY

<i>July 1st.</i>	AVERAGE HEIGHT	COLOR	BLOOM	HARDI- NESS
Dahlia.....	4 ft.	various	*	tender
Begonia	1½ "	"	*	"
Hunnemannia.....	2 "	yellow	*	h. h. p.
Cardinal Flower.....	2 "	red	6 wks.	h. p.
<i>Lilies longiflorum</i>	2-4 "	white	4 "	"
<i>Stock</i>	1½ "	various	*	h. h. a.
<i>Salvia</i>	2-4 "	scarlet	*	"
<i>Zinnia</i> , crimson, rose, white, yellow.....	2 "	various	*	h. a.
<i>Nasturtium</i>	climbing	"	*	"
<i>Nasturtium</i> , dwarf.....	1 ft.	"	*	"
<i>Sweet Alyssum</i>	6 in.	white	*	"
<i>Nicotiana affinis</i>	3 ft.	"	*	h. h. a.
<i>Nicotiana sanderæ</i>	3 "	red	*	"
<i>Verbena</i>	1 "	various	*	h. a.
<i>Gaillardia</i> (annual).....	2 "	yellow and red	*	"
<i>Hardy Phlox paniculata</i> .	3 "	various	8 "	h. p.
<i>Phlox Drummondii</i>	1 "	"	*	h. a.
<i>July 15th.</i>				
<i>Larkspur</i>	1½ "	"	*	"
<i>Calliopsis</i>	2 "	yellow, brown	*	"
<i>Early Cosmos</i>	4 "	white, pink, red	10 "	"
<i>Lavatera</i>	2 "	pink	10 "	"
<i>Marigold</i> , African.....	2-4 "	yellow	*	"
<i>Candytuft</i>	1 "	various	8 "	"
<i>Love-in-a-Mist</i>	1 "	blue	8 "	"
<i>Arctotis grandis</i>	2 "	white	*	"
<i>Lobelia Erinus</i>	6 in.	blue, white	*	t. a.
<i>Torenia fournieri</i>	8 "	blue	*	"
<i>Portulaca</i>	6 "	various	*	h. a.
<i>Ageratum</i>	1 ft.	blue	*	"
<i>Canna</i> (bulb)	4 "	red, yellow	8 "	tender
<i>Convolvulus</i> , dwarf.....	1 "	various	8 "	h. a.
<i>Sunflowers</i>	4-6 "	yellow	*	"
<i>Salpiglossis</i>	1 "	various	9 "	h. h. a.
<i>Calendula</i>	1 "	yellow	*	h. a.
<i>Balsam</i>	2 "	various	6 "	t. a.

The sign * means blooms till frost.

JULY

BLOOM CONTINUED FROM PREVIOUS MONTH

Annual Poppy, Coreopsis, Foxglove, Campanula, Lychnis, Rambler Rose, Begonia, Sweet William, Dianthus, Gaillardia (h. p.), Cornflower, Sweet Sultan, early Phlox, Valerian, Yucca, Japanese Iris, Pentstemon, Sweet Pea, Petunia, Achillea Pearl, Shasta Daisy, Anthemis, Pansy, Agrostemma, Jacob's Ladder, the Spiræas, Scabiosa Caucasica, Snapdragon, Geranium, Delphinium.

Open afresh your round of starry folds,
Ye ardent marigolds!
Dry up the moisture from your golden lids,
For Apollo bids
That in these days your praises should be sung
On many harps, which he has lately strung:
And when again your dewiness he kisses,
Tell him I have you in my world of blisses.

KEATS.

XII

AUGUST

With the passing of this month the procession of the flowers, with its ever varying arrivals of new blossoms, is nearly at an end. However, we are not without flowers, for the garden can look its gayest up to mid-September if it has been properly planted with masses of the most effective ones. The more vigorous flowers, chiefly annuals, will linger on, a few new hardy faces will straggle in, and a very few of the old friends will reappear if they have been especially well treated.

The gardener's reward is sweet indeed when late summer smiles upon a garden overflowing with brightest bloom, for there he finds a spot that makes the world more beautiful.

PRACTICAL HINTS FOR WORK

August 1st.

Watch for the black beetles and yellowish bugs on Asters, and knock them off into a pan of kerosene water, making sure that they are finally destroyed.

Hoe and weed the beds and train the vines that require it.

Thin out the seedlings of July-sown *hardy* plants by transplanting in the seed-beds, and wait until about September 15th to set them where they are to winter. Sow Pansy seeds now; and the seeds of hardy perennials not already started had better be sown before the middle of this month.

Collect seeds in the pods.

Cut down the Hollyhock stalks almost to the ground.

THE SEASONS IN A FLOWER GARDEN

August 15th.

Order *Lilium candidum*, Daffodils, and other early bulbs that should be planted between September 1st and 15th.

Cut off the fading flowers of the Phloxes, and new flowers will come from the sides of the stalks.

Continue cutting off *all* withering blossoms, to encourage further bloom.

Remember that September 15th is not far distant, and that about that date is the best time for garden-making in new beds, and for transplanting in full beds, wherever it is possible to handle plants that need to be moved.

THE FLOWERS OF AUGUST

FIRST FLOWERING IN AUGUST

<i>August 1st.</i>	AVERAGE HEIGHT	COLOR	BLOOM	HARDI- NESS
<i>Hibiscus Moscheutos</i>	5 ft.	white, pink	6 wks.	h. p.
Rose <i>Wichuraiana</i> (or earlier).....	trailing	white	4 “	“
<i>Golden Glow</i> (<i>Rudbeckia</i>)	6 ft.	yellow	6 “	“
Sunflowers (<i>Helianthus</i> mult. fl. pl.).....	4 “	“	6 “	“
<i>Hyacinthus candicans</i> ...	3½ “	white	4 “	“
<i>Achillea Eupatorium</i>	3-4 “	yellow	8 “	“
<i>Achillea millefolium</i>	3-4 “	pink	8 “	“
<i>Phlox paniculata</i>	2-3 “	various	6 “	“
<i>Veronica</i>	2 “	blue	8 “	“
<i>Clematis Davidiana</i>	3 “	sky-blue	4 “	“
<i>Physostegia</i>	5 “	pink	6 “	“
<i>Lilium speciosum, auratum</i> , etc.....	3 “	white, pink, etc.	4 “	“
<i>Lilium tigrinum</i> and <i>superbum</i>	3½ “	orange-red	6 “	“
<i>Gypsophila paniculata</i> ...	2 “	white	6 “	“

AN IDEAL DESIGN.

Amateurs may prefer fewer shrubs and more flowers.

AUGUST

FIRST FLOWERING IN AUGUST

<i>August 1st.</i>	AVERAGE HEIGHT	COLOR	BLOOM	HARDI- NESS
<i>Helenium pumilum</i> , etc.	1½ ft.	yellow	8 wks.	h. p.
<i>Chrysanthemum</i> , single (Painted Daisy)	1 "	various	6 "	h. a.
<i>Helichrysum</i> (Everlasting)	2 "	crimson	*	"
<i>Scabiosa</i>	2 "	various	*	"
<i>Asters</i>	2 "	"	8 "	"
<i>Celosia</i> (plume variety).	1½ "	red, yellow	*	t. a.
<i>Aconitum Japonicum</i> ...	2 "	blue	6 "	h. p.
<i>Didiscus</i>	1½ "	"	8 "	h. a.

BLOOM CONTINUED FROM PREVIOUS MONTHS

Hollyhock, Stock, Gladiolus, Delphinium, Nasturtium, Convolvulus, Salvia, Sunflower, Monarda, Zinnia, Sweet Alyssum, Portulaca, Platycodon, Nicotiana, Calendula, Calliopsis, Larkspur, Gaillardia (h. p.), Verbena, Salpiglossis, Stokesia, Jacob's Ladder, Liatris, Coreopsis, Geranium, Sweet Peas, Petunia, Achillea Pearl, Snapdragon, Dahlia, Candytuft, Love-in-a-Mist, Marigold, Ageratum, Hunnemannia, Arctotis, Canna, Begonia, Lobelia, Bocconia, Pentstemon ovatus, Cardinal Flower, annual Gaillardia, early Cosmos, Lavatera, Torenia fournieri, Balsam, Phlox Drummondii.

The sign * means blooms till frost.

PART THREE
GENERAL INFORMATION

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PART THREE—GENERAL INFORMATION

XIII

THE WILD GARDEN

Transplanting.—The little wild-growing things of the woods and fields may be dug up and brought to our shady corners or sunny borders reserved for them if the right soil awaits them; otherwise it is useless to expect much success. In moving wild plants, consider their natural soil as well as position as regards sunlight or shade. If a fern is a native of rocks or stones, imitate its surroundings and “plant” stones about it if necessary. Most of the dealers in plants can supply many of the hardy ferns and wild flowers, but when they are transferred directly from their natural haunts it is easier for the gardener to study and to know their requirements.

Ferns.—Autumn is the best time for transplanting ferns, but all wild plants, even those in bloom, may be moved at any time if sufficient earth is “balled” about the roots, and provided that they are well watered and mulched when planted.

Ferns show best in the cool woodland, with occasional sunlight gilding their feathery fronds, though many of them thrive without much shade, especially if there is moisture. A few grow in dry ground and sun.

Wild Seeds.—Some nurserymen advertise packages of mixed seeds that may be sown broadcast in the wild garden, but of these seeds some will have to be transplanted if the location in which they appear happens to be unsuitable.

THE SEASONS IN A FLOWER GARDEN

Location.—In seeking a location for a wild garden, choose, if possible, a sunny nook bordering on a grove of trees, that the place may include the flowers for sunshine as well as those for shade; and, above all, locate near brook, bog, or pool, if such an opportunity should be yours.

PREPARATION FOR A WILD GARDEN ON DRY GROUND

Most wild plants will succeed if planted in ground prepared as follows:

If the location is dry and sandy, dig out a space eighteen inches deep and lay in two inches of clay or spread a two-inch layer of broken shells and ashes on the bottom. Spread over that twelve inches of good soil, with old leaves, and fill up the remaining space with leaf-mold from the woods or from the florist's. Stones under the surface and a few above ground will complete the natural conditions and help to retain moisture. If the soil of your place is naturally heavy and rich, add several inches of leaf-mold, and let stones abound. Raise the bed two inches above the natural ground. Allow dead leaves to accumulate, and do not remove them all when the season for cleaning up arrives.

FLOWERS FOR THE WILD GARDEN

The following list contains a few of the most common wild flowers in the Eastern States, under their most familiar names; most of them purchasable at the nurseries.

BEGINNING TO FLOWER	SOIL *	LOCATION
<i>March and April.</i>		
Crocus (treat as wild)	dry	sun or shade
Snowdrop " " "	damp	" "
Scilla	dry or damp	" "

* The preferred habitat of these flowers is given, but some of them will often thrive, though not so well, under other conditions.

THE WILD GARDEN

BEGINNING TO FLOWER

SOIL *

LOCATION

March and April.

Bloodroot.....	dry or damp	partial shade
Spring Beauty.....	damp	“ “
Trillium.....	“	shade
Adder's Tongue.....	“	“
Jack-in-the-Pulpit	dry or damp	“
Violet	“ “	“
Marsh Marigold.....	damp	sun
Saxifrage.....	dry	shade
Pink Showy Orchid	damp	“
Daffodil (treat as wild).....	heavy	sun or shade
Star of Bethlehem.....	damp	sun

May.

Hepatica.....	dry	shade
May Apple	damp	“
Foam-flower.....	“	“
False Solomon's Seal.....	“	“
Baneberry.....	“	“
Honeysuckle (Bush).....	dry or damp	“
Columbine (red)	“ “	sun or shade
Lupine (wild).....	dry	sun
Moccasin-flower.....	dry or damp	shade
American Laurel.....	dry	“
Catchfly.....	“	sun
Forget-me-not, <i>M. palustris</i>	damp	shade
“ <i>M. dissitiflora</i>	dry	sun

June.

Red Wood Lily.....	dry	shade
Anemone (wood)	“	partial shade
Lilium Canadense	damp	sun
Flowering Raspberry.....	dry	partial shade
Flags.....	dry or damp	sun
Showy Lady Slipper.....	damp	shade
Tawny Day Lily.....	dry	sun
Bergamot.....	“	partial shade

*The preferred habitat of these flowers is given, but some of them will often thrive, though not so well, under other conditions.

THE SEASONS IN A FLOWER GARDEN

BEGINNING TO FLOWER	SOIL *	LOCATION
<i>June—Continued.</i>		
Yarrow.....	dry	sun
Butterfly-weed	“	“
Rhododendron.....	“	shade
<i>July.</i>		
Iron-weed	damp	sun
Meadow Rue.....	“	“
Meadow Sweet.....	“	“
Jewel-weed	“	“
Queen's Lace.....	dry	“
Bouncing Bet.....	“	“
Meadow Beauty.....	damp	“
Cardinal Flower.....	“	“
Steeple-bush	“	“
Wild Phlox.....	dry or damp	sun or shade
Lobelia—blue.....	damp	sun
Lily, Tiger	dry or damp	“
Lily, Turk's-cap	“ “	“
<i>August and September.</i>		
Marsh Mallow.....	damp	sun
Liatris scariosa	dry	“
Fireweed	“	“
Joe-pye-weed	damp	“
Bee Balm.....	dry or damp	“
Elecampane.....	damp	“
Tansy.....	dry	“
Asters (wild)	dry or damp	sun or shade
Golden-rod	dry or damp	sun
Gentian.....	damp	“
Helianthus.....	dry or damp	“

HARDY FERNS

Hardy Ferns effective for a wild garden or for the shady side of a house and obtainable at the nurseries:

Adiantum pedatum or Maidenhair, 1 foot..... partial shade
 Aspidium marginale, 2 feet, dry places..... shade

*The preferred habitat of these flowers is given, but some of them will often thrive, though not so well, under other conditions.

THE WILD GARDEN

<i>Asplenium Filix-fæmina</i> or Lady Fern, 2-3 feet.....	sun or shade
<i>Dicksonia punctilobula</i> or Gossamer Fern, 2 feet.....	“ “
<i>Onoclea sensibilis</i> or Sensitive Fern, 1 foot, moist places	“ “
<i>Onoclea Struthiopteris</i> , 3 feet, moist places	“ “
<i>Osmunda cinnamomea</i> or Cinnamon Fern, 4 feet, moist places.....	“ “
<i>Osmunda Claytoniana</i> , 3 feet, moist places	“ “
<i>Osmunda regalis</i> or Flowering Fern, 3 feet, moist places	“ “
<i>Phegopteris hexagonoptera</i> or Beech Fern, 1 foot, dry places.....	“ “
<i>Polypodium vulgare</i> or Polypody, 8 inches, rocks	“ “
<i>Pteris aquilina</i> or Brake, 2 feet, dry places.....	“ “
<i>Scolopendrium</i> or Hart's Tongue, 10 inches.....	partial shade

XIV

THE WATER GARDEN

WATERSIDE PLANTS

Fortunate the flower-lover whose place is blessed with a brook or pool, for there indeed is a Wild Garden half-way made, where wild plants love to spread, while the birds in countless numbers bathe and drink on the sloping margin. The stream meandering through sun and shadow offers endless opportunity for sprinkling its banks with flowers craving moisture, some to thrive only in shade, while others live for sunshine.

In Sun.—Some of the sun-plants for the waterside are Irises and common blue Flags, Steeple-bush, Poet's Narcissus, Cardinal Flowers, Joe-pye-weed, *Lilium Canadense* and *L. superbum* (Turk's-cap Lily), Marsh Mallows, Gentians, Wild Rice, Meadow Beauty, Sweet Brier, Pickerel-weed, and Water Avens.

In Shade.—In *shaded places* grow the several Violets, Lilies-of-the-Valley, Orchids, Trillium, Ferns, Anemones, and Forget-me-not (*Myosotis palustris*).

WATER-LILIES

There are a number of aquatic plants named in the flower catalogues to be grown in ponds, pools, or tubs, but none are more lovely than the Nymphæas, or Water-Lilies. Some of the hardy ones will grow in slow-running water, if properly anchored by a stone, or a part of the stream may be diverted into a pool that

THE WATER GARDEN

is dammed. In small artificial basins or tubs grow only the varieties known as *N. Laydekeri* and the pigmies *N. tetragona*—four or five plants in a space four feet in diameter. In a small pond, in addition to these, grow a few of the *Marliac* hybrids, as almost all others are too rampant. Avoid in the beginning the overcrowding of a pond with new plants.

HOW TO PREPARE A SMALL POOL

For a pool where there is no current, lay a concave Portland cement bottom, and upon this make a bed six inches deep, of rich loam and rotted manure. The water should rise about three feet deep in the centre, decreasing to about fifteen inches at the margin. If the water is muddy, cover the soil with one and one-half inches of sand. A brick or stone is laid above the root of each newly planted Lily until it becomes established. An artificial pond with an outlet may have a clay bottom well packed and one foot deep.

Wherever Water-Lilies are sold, free information may be had regarding their culture and the habits of the different varieties.

XV

SHRUBS

The true lover of outdoor life must always make a plea for natural lines in the growing bush or tree and for a planting that will give each specimen a chance to unfold itself freely. When shrubs are to be massed in groups, aim to place them so that contact will be ever so slight when they are full grown. If shrubs are wanted for a hedge, how much more effective it is when each bush is allowed a full development of branch and blossom, except for a certain moderate trimming to maintain a uniform height and to control a few wayward side-shoots without interfering with the natural proportions. Undoubtedly, in some formal gardens the stiff clipped hedge is essential to the style of the garden, but as a rule the free-growing shrub-hedge is preferred by him who has a soul for the Green Things.

PLANTING

In planting shrubs, prepare the soil as for hardy garden-beds by digging it out to the depth of two feet, and not less than three feet wide, and enrich it as described on page 11. Small shrubs should be planted three feet apart; the larger ones, however, should be from five to eight feet apart.

Shrubs are moved either in October or in March, April or May. After setting the shrub and working in the soil firmly and carefully about the roots, pour in a half-pail of water and

SHRUBS

allow it to absorb, after which fill in the rest of the earth, tread it down firmly, then water it again.

BOX AND PRIVET HEDGES

In putting out the young plants of Box and Privet which are to be kept as close-clipped hedges, set them in a trench of rich soil four inches apart; in March prune them back severely until they become dense and impenetrable bushes; even then they will require annual spring trimming. Privet may need trimming again in August.

In planting small fruit trees, dig a hole three feet deep and at least five feet in diameter, and fill it with rich heavy soil and manure.

In planting shrubs, trees, etc., avoid setting them too deep, or they will not prosper.

LARGE SHRUBS

The Best for a Hedgerow over Five Feet in height

	BLOSSOMS		BLOSSOMS
Lilac or Syringa (several varieties).....	May	Spiræa Lindleyana	June
Althæa or Rose of Sharon (several varieties)	Aug.	Snowball or Viburnum Sieboldi, V. prunifolium, V. dentatum, V. plicatum (Japanese)	"
Mock Orange or Philadelphus (P. coronarius preferred)	June	Hawthorn or Cratægus Crus-galli and C. coccinea.....	May
Deutzia crenata.....	"	Bush Honeysuckle or Lonicera fragrantissima and L. Morrowi, etc.....	"
Weigela (tall varieties) ...	"		
Rosa Rugosa.....	"		
Spiræa Van Houttei.....	"		

THE SEASONS IN A FLOWER GARDEN

POPULAR SUMMER-FLOWERING SHRUBS, IN ADDITION TO THE VARIETIES ALREADY NAMED

BLOSSOMS		BLOSSOMS	
Clethra alnifolia or Sweet Pepper Bush	June	Hydrangea paniculata grandiflora.....	Sept.
Calycanthus floridus or All- spice Shrub.....	"	Spiræa Billardi, S. opuli- folia, S. Anthony Waterer, S. Reevesi, S. Doug- lasi.....	June
Weigela nana variegata, etc.	"	Rubus odoratus or Flower- ing Raspberry.....	"
Deutzia Fortunei and Pride of Rochester	"	Chionanthus Virginica or White Fringe	"
Berberis Thunbergi or Bar- berry (red foliage).....	Sept.	Rhodotypos kerrioides....	"
Berberis vulgaris purpurea	"		

MAY-BLOOMING SHRUBS

Prunus Japonica or Double- flowering Plum.	Exochorda grandiflora or Pearl Bush.
Prunus triloba fl. pl.	Deutzia gracilis.
Cydonia Japonica or Japanese Quince.	Tree Pæony.
Spiræa arguta, S. Thunbergi.	Daphne Cneorum.
Spiræa prunifolia.	Forsythia viridissima, F. Fortunei.

FLOWERING DWARF TREES

BLOSSOMS		BLOSSOMS	
Andromeda arborea	June	Magnolia conspicua.....	May
Cerasus Sieboldi or Japa- nese Cherry	May	Magnolia Soulangeana....	"
Persica Vulgaris or Flower- ing Peach	"	Cercis Canadensis or Judas Tree	"
Pyrus spectabilis or Flowering Crab Apple .	"	Cornus florida or Dogwood (white, pink)	"
		Halesia or Snowdrop Tree	"

XVI

VINES

As the roots of almost all *hardy* vines go deep and require good heavy soil the space prepared for them should be nearly two feet deep, and three feet wide each way.

One cubic foot of good soil is all that is required for *annual vines*.

THE MOST POPULAR HARDY VINES

	BLOSSOMS
Aristolochia Siphon or Dutchman's Pipe.....	June
Lonicera or Honeysuckle (several varieties).....	June and later
Ipomæa pandurata or Hardy Moonflower	July
Bignonia radicans or Trumpet Vine.....	August
Wistaria.....	May
Clematis paniculata.....	late August
Climbing Roses { Crimson Rambler, etc.....	July 1st
{ Rose Setigera.....	" "
{ Wichuraiana.....	" 15th
Wild Grape Vine	
Celastrus scandens or Bitter Sweet.....	
Ampelopsis Veitchii or Boston Ivy.....	

ANNUALS

Cobæa scandens or Cup and Saucer Vine.....	August
Gourd	"
Nasturtium.....	all summer
Balloon Vine or Love-in-a-Puff	July
Canary Bird Vine or Tropæolum Canariense.....	August
Wild Cucumber Vine or Echinocystis.....	"
Japanese Hop or Humulus Japonicus Variegatus.....	

XVII

ROSES

Roses require more labor than any other plant, but every garden should have as many as can be successfully cared for. In planting Roses, the choice for a small garden is made difficult by the long and tempting lists of them in catalogues. If the garden and the purse are both large, it is a simple matter to choose the varieties that shall adorn the Rose garden; but when it is otherwise, we must look for satisfaction from a limited list of some which may be ranked among the favorites. If there is space for but a few, the June Roses and Ramblers may be preferred as being the hardiest and requiring less winter protection.

Hardy Roses and Hardy Hybrid Perpetuals may have an occasional later blossom after the June bloom. They need a little winter protection.

The Tea Rose and Hybrid Tea, and the few climbing Teas, bloom at intervals from June until frost. They are the tender Roses, and require heavy winter covering, preferably straw tied about the plants, with about eight inches of manure as a top-dressing and two feet of leaves.

The Polyantha Rose needs light covering in winter; it blooms at intervals during the season.

A FEW OF THE BEST HARDY HYBRID PERPETUAL ROSES

JUNE ROSES

Pink—Mrs. John Laing, Paul Neyron, Baroness Rothschild, Magna Charta, La France.

ROSES

White—Gloire Lyonnaise, Margaret Dickson, Boule de Neige, Coquette des Blanches, Frau Karl Druschki.

Red—General Jacqueminot, Ulrich Brunner, Victor Hugo, Rosieriste Jacobs.

Yellow—Persian Yellow, Soleil d'Or.

SOME HARDY ROSES AND HARDY CLIMBING ROSES

Damask Rose—Leda, York. Lancaster, etc.

Moss Rose—Gloire de Mosses, Crested Moss, Blanche Moreau, Henry Martin.

Rugosa Rose—Very hardy; for hedges; red, white. 4-5 ft.

Polyantha Rose—Marie Pare, Perle d'Or, Clothilde Soupert.

Sweet Brier Rose of England.

Hardy Climbing Roses—The Dawson Rose, Baltimore Belle, Prairie Rose or Setigera.

Rambler Roses—Hardy Climbing, Crimson, etc.; bloom July 1st.

Memorial Rose or Wichuraiana—Trailing habit; good for low walls and rocks, as well as for trellis; blooms July 15th or later.

TEA AND HYBRID TEA, OR THE EVERBLOOMING AND TENDER

MONTHLY ROSES

Pink—*La France, *Belle Siebrecht, *Killarney, *Maman Cochet.

White—*Maman Cochet, Bride, Marie Lambert, *Kaiserin Augusta Victoria.

Red—Meteor, *Gruss an Teplitz, Jules Finger, Queen's Scarlet.

Yellow—*Francisca Kruger, Marie Van Houtte, Etoile de Lyon, Safrano, Franz Deegen.

* These roses are the hardiest of the everblooming varieties.

PLANTING

It is well to prepare the new Rose-beds in the early autumn, allowing time for the settling of the soil before planting; and although the hardy Roses may be planted from September 15th to November 1st, it is better, in colder localities at least, to wait until spring. Tender Roses are always planted in spring. The soil for Roses should be very rich, with well-rotted manure to the depth of nearly two feet; the earth should be dug out in order to enrich it deeply and to remove stones and poor soil. Roses must grow in the full sun.

In planting, spread out the roots so that they are not coiled or crossed; cut off any bruised parts of the roots. With dwarf budded stock, set the plant so that the bud—the grafted point—is three or four inches below surface. When Roses are grown on their own roots, cover the crowns with two or three inches of soil.

Set plants three feet apart, excepting climbers and Rugosas, which need to be four feet apart.

Do not plant in wet weather, or when the ground is frozen; do not attempt to plant until the soil of the bed is more or less dry and loose and the temperature moderate; do not let the roots stay in a heated room, nor lie exposed to the cold or to the sun's rays, and bring out from their covering only as many plants as can be handled promptly.

Prune back severely, when planting in spring, to within a foot of the ground.

Prune but little the autumn-planted Roses; prune them the next spring.

Remove suckers from the plants.

To keep Roses in the best condition, they should be lifted

A GRASS-PATH GARDEN, WITH ROSE-BOWER IN THE CENTRE.

Araturn, Mt. Kisco, N. Y.

ROSES

every five years in order to renew and enrich the soil beneath them.

PRUNING—A FEW HINTS

Prune in mid-March the hardy Roses, and about April 15th the tender Roses; leave four or five canes, the top eye of each to point outward, to prevent the crossing of branches. Pruning Roses to within one foot of the ground assures large flowers rather than a profusion of bloom. If they are very strong bushes, prune less severely, leaving two feet of the plant. Bushes like Sweet Briars are lightly trimmed.

Do not treat *Rosa Rugosa* and climbers as other Roses. Cut off a little of the weaker growths, and remove dead wood. They do not require much pruning. Keep all the bushes free from suckers by cutting them off as close to the root as possible.

GENERAL TREATMENT

March 20th.—Not later, prune hardy Roses as already directed.

March 30th.—Plant hardy Roses, pruning severely the new plants; remove some of the litter from old hardy Roses.

April 1st to 15th.—Prune the tender Roses, remove litter gradually, and fork in the manure of autumn.

April 25th.—Plant tender varieties. Be ready for the green-fly, etc. Spray all Roses with whale-oil soap or kerosene emulsion to prevent any appearance of the various pests to which they are subject. Be careful that the solution is stirred up and not strong enough to burn the plants. Read pages on Insecticides and Insects.

May 10th.—Arsenate of lead or else some hellebore may be necessary now, and possibly fortnightly until July 10th, especially for Roses which will have a later bloom. In most gardens spraying is not necessary after this date.

THE SEASONS IN A FLOWER GARDEN

After May 20th.—It is well to treat Roses to liquid manure. Spray with the soap or emulsion if required.

After June 1st.—Look for the Rose-bug and the Rose-worm.

June 25th and after.—Look for mildew. Don't fail to keep the soil in the Rose-bed well hoed and watered if the season is dry.

July 5th and after.—Watch for the blackspot which is due in some gardens if the season is wet. It is well after a rain to mulch the ground about Roses with old manure, old leaves, or grass cuttings, in order to retain the moisture. Do not let flowers die on the bushes of Tea Roses, and in cutting them off of these everblooming varieties, leave one or two outward-growing eyes on the stems below the cut, in order to secure a later bloom.

August.—Keep the plants healthy so that the stock will not be weakened.

Beginning about November 15th, after the first heavy frost, cover the Rose-bed with a good coat of manure. At the last of the month, finish covering with dry leaves, held down with stalks or boughs. Cover tender Roses two or three feet deep.

XVIII

THE SEED-BED

VARIOUS METHODS FOR SEED-SOWING

Seeds for the flower garden are sown early either in hot-bed, cold-frame, or window-box, or later in the open ground seed-bed, in a place that is kept for the purpose.

The plants are later transplanted to the flower-bed.

Some seeds of annuals are sown in the bed where they are to grow, because they die if transplanted, and the superfluous seedlings are pulled up and discarded.

Other seeds are sown and transplanted in the same flower-bed when a starting-place—a separate seed-bed under glass or otherwise—is lacking.

With but few exceptions, seedlings are stronger for being transplanted, and better able to survive drought.

HOT-BED

Sow seeds of annuals in the hot-bed soon after March 10th, perennials and biennials then or later. The professional gardener starts his seeds in greenhouse or hot-bed by February 1st. Amateurs will find March early enough.

COLD-FRAME

This is another good seed-bed, though the seeds make more rapid progress in a hot-bed. Sow seeds the last of March.

Hardy perennial seeds may also be sown in frames in July

THE SEASONS IN A FLOWER GARDEN

and August without using the glass cover, unless desired in heavy rain, when it should be slightly raised above the frame.

For a small garden sow at the lower end of the hot-bed or cold-frame one line, or half a line, of each kind of seed desired. When the seedlings are about one inch high transplant them from one to two inches apart in the upper half of the frame, the tallest growing at the top. A second frame may be required to contain all. Give these seed-beds under glass in spring more or less ventilation in daytime. Keep them closed at night in cold weather.

WINDOW-BOX

The box must be shallow, three or four inches deep; holes are bored in the bottom, and stones scattered over the holes for drainage. Seeds are sown about the middle of March. Transplant seedlings into other shallow boxes, and turn the boxes daily so that the little plants will not become crooked in growing to the light. While the seeds are germinating, and awhile after, the boxes may be covered with squares of glass. This is not absolutely necessary, however.

SEED-BED IN OPEN GROUND

Many gardeners have success in this later seed-bed. It should have shade a part of the day. Seeds of hardy biennials and hardy perennials are sown in April; or the latter may be sown as late as August. Seeds sown in summer should be shaded while germinating if the location is sunny all day. For information about *annuals* sown in open ground, read the chapter on Seeds of Annuals.

RULES FOR ALL SEED-BEDS

The soil for three or four inches in depth must be rich and *finely* pulverized. Large seeds are placed about one-

THE SEED-BED

half inch under; smaller seeds are just covered; very fine seeds are sown on the top of the earth, and only pressed down with a flat board. Make shallow trenches to receive the larger seeds by pressing a long pencil lengthwise into the soil; sow these seeds thinly and cover them evenly and press the soil firmly over them. The soil should be well settled and slightly moist before the seeds are sown. Fine seeds sown in the open are sometimes washed away by heavy rains.

TRANSPLANTING SEEDLINGS

When watering, use a fine spray. Do not keep the soil too damp, and if it seems hard and mouldy after the seedlings are up work the soil between lines with a pointed stick. Use a similar stick or a dibble for making the holes to receive the seedlings at the time of transplanting, which is done when the plant is about an inch high. Do not firm the soil close up to the neck of the seedling. When moving young plants to their final position soak the soil well before lifting them, so that more earth will be retained about the roots. Protect them if possible from the sun for two days after transplanting and water them well after 4 P.M.

XIX

HOW TO MAKE A HOT-BED AND A COLD-FRAME

A HOT-BED

Buy a frame and sash and fit the frame over a hole two feet deep. The frame alone should stand eighteen inches at the back and twelve inches in the front to give the proper slope to catch the sunlight, and should face south or east if possible. The frame when set should be above ground about fifteen inches at the back and nine inches in front. Fill the excavation three-fourths full of fresh horse-manure mixed with one-third as much of dried leaves. Tramp it all down thoroughly. Let it rest two days, then turn it over, and let it rest again five days; turn it again and trample it down thoroughly in layers and evenly till it is eighteen inches deep. Put on the sash and wait for the heat to rise. When the thermometer registers from eighty to ninety degrees, not more, put in six or seven inches of fine, rich, light garden soil, press it down, and level it off smoothly. The seeds may be sown about the 10th of March. The outer sides of the frame should be banked with manure if the frame is to be used before March.

A COLD-FRAME

In making a cold-frame, the excavated space below the frame need be but a foot deep. The lower half of it is filled with manure about six inches deep, the remaining upper six inches with fine rich soil. The frame is set a few inches in the ground.

The dimensions, etc., are the same as those of hot-beds,

HOW TO MAKE A HOT-BED AND A COLD-FRAME

and the rules governing each are similar after the seeds are planted. Seeds are sown in the cold-frame about April 1st.

Frames should be set in a sheltered spot if possible. The hardy seedlings should be well protected until the middle of April, the annuals for a longer time.

XX

SEEDS OF HARDY PLANTS

PERENNIALS AND BIENNIALS

Perennials and *biennials* are usually started under glass in February, March, or April, but if there is not room for them there with the annuals, they may be sown by mid-April in the open ground.

Or, *perennials* are started in July or early August in the open seed-bed or empty frame, when there is not so much garden work to be accomplished; but they will be much smaller plants in the first flowering season, and some will not be old enough to bloom then.

If some seeds do not germinate, soak them for twenty-four hours in water.

Few perennials or biennials bloom the first year they are sown.

Dianthus Pinks (h. b.), sown early, bloom the first year.

STOCK ON HAND

Always have on hand in the seed-bed an oncoming stock of biennials (which live only two years), and some of the favorite and shorter-lived perennials, ready to replace any that may be winter-killed.

Pansy seeds treated as hardy biennials, but sown the 1st of August, and young perennials may be transplanted about September 15th to their permanent position; (the less hardy perennials and biennials may be set in the cold-frame to winter); Pansies are wintered in the cold-frame or open ground and protected with leaves.

SEEDS OF HARDY PLANTS

Campanula, Foxglove, Hollyhocks, Sweet William, and most hardy perennials should be sown by April to insure full bloom the next summer.

Some of the young plants generally kept in stock are the perennials, Foxglove, Sweet William, Anemone Japonica, Monkshood, Pyrethrum, Gaillardia, Anthemis, and all biennials, especially Campanula and Dianthus; also Hollyhocks, and Pansies, treated as biennials.

SELF-SOWN SEEDS

Some of the self-sown hardy seeds are Hollyhocks, Columbine, Oriental Poppies, Gaillardia, Foxglove, Forget-me-not, and a few others. They may be transplanted.

Forget-me-nots are raised from seed sown outdoors in August or early April. They are half-hardy perennials, and are sometimes killed by winter.

PLANTS OBTAINABLE FROM OTHER GARDENS

In small gardens where only a few of each kind of perennial are required, it is better, if possible, to obtain the young plants from a nursery or from friends possessing gardens. Every year there are many of the perennials in old gardens that must be thinned out on account of the increased size of the clumps, and gardeners are glad to dispose of them. Some of them are Phlox, Pæonies, Irises, Pyrethrum ulig., Rudbeckia, Hemerocallis, Lilies-of-the-Valley, Lilium superbum, Physostegia, Achillea Pearl, Heliopsis, Helianthus, Coreopsis, Rosa Rugosa, Monarda, Bocconia, Honeysuckle, Sweet Rocket, Anemone Japonica, hardy Chrysanthemums, Clove Pinks, Dahlias, Cannas, Valerian, as well as seedlings of Hollyhocks, Foxglove, Columbine, Gaillardia, Oriental Poppies, Violets, and others.

XXI

SEEDS OF ANNUALS

SOWN OUT OF DOORS AND NOT NECESSARILY TRANSPLANTED

Seeds that may be sown in the open ground, April 15th or later, are those of hardiest plants, i.e., Love-in-a-Mist, Cornflowers, Sweet Sultan, Calendula, Calliopsis, Petunias, Convolvulus, Sunflowers, and Sweet Alyssum. Sow also annual Poppies, Candytuft, and Mignonette; these three do not bear transplanting; sow the seeds where they are to remain, and thin out. Silene and Larkspur had better be sown by September 1st to bloom the following year. Larkspur may also be sown under glass in March.

SOWN INDOORS, OR OUT OF DOORS LATER, AND TRANSPLANTED LATE

Seeds that are sown under glass or in a window-box about March 15th, or that may be sown in open ground after danger of frost, and transplanted after May 25th, are the following:

Marigold, Chrysanthemums (Painted Daisies), Phlox Drummondii, blue Didiscus, Cosmos, Asters, Arctotis, Snapdragon, Salpiglossis, Zinnias, Verbena, Larkspur, Ageratum, Celosia, Salvia, Scabiosa, Nicotiana affinis, Hunnemannia, Stock, and annual Gaillardia. The fifteen last named are more apt to give best results when started in a frame or box, and will bloom earlier in consequence, although they may be started out of doors, excepting Salpiglossis, as above stated.

SEEDS OF ANNUALS

When started out of doors, *Salvia* seeds are not sown until June. Sow *Portulaca* out of doors June 1st. *Lavatera* and *Nasturtium* are sown in open beds about May 15th and are not transplanted.

SELF-SOWN SEEDS

The self-sown seeds are those which seed themselves from year to year; they cannot be depended upon to come up in just the right place, but generally may be transplanted. They are those of *Calendula*, annual *Silene*, *Larkspur*, *Love-in-a-Mist*, annual *Poppies* (*Poppies* do not survive transplanting), *Sweet Sultan*, *Nicotiana*, *Cornflower*, *Sunflower*, *Petunias*, *Portulaca*, and a few others. It is best to preserve their seeds, and sow them every year.

Endeavor to do the transplanting during a rainy period.

XXII

FLOWERS FOR SPECIAL PLACES

PLANTS FOR SHADED BEDS

Those that *will bloom* in partial shade:

Torenia Fournieri, t. a.
Nicotiana, h. a.
Salvia, h. h. a.
Phlox, h. p.
Columbine, h. p.
Cardinal Flower, h. p.
Lupine, h. p.
Pyrethrum uliginosum, h. p.
Veronica, h. p.
Coreopsis, h. p.
Foxglove, h. p.

Those that *require* partial shade:

Anemone Japonica, h. p.
Monkshood, h. p.
Tuberous Begonias, t. a.
Lilium speciosum rub. h. p.
Godetia, h. a.
Pansies, h. a.
Violets, h. p.
Forget-me-not, h. p.
Ferns, h. p.
Myrtle.
Lilies-of-the-Valley.

PLANTS TO COVER BARE PLACES IN A SHORT TIME

Annuals from seed in six weeks; they bloom till frost; all do well in dry places.

Sunflower.
Petunia.
Nasturtium.
Marigold.
Portulaca.
Convolvulus, dwarf.
Calliopsis.
Phlox Drummondii.
Nicotiana.

Rapid - spreading hardy
perennials:

Sweet Rocket.
Golden Glow.
Bocconia.
Monarda.
Heliopsis.
Helianthus.
Arabis Alpina.
Rose Wichuraiana (excellent creeper for covering rocks).
Scabiosa Caucasica.

FLOWERS FOR SPECIAL PLACES

THE CENTRE GARDEN-BED IN BLOOM FROM MAY TILL FROST

For all-summer bloom sow *Silene* seeds in September for the next year. This plant will bloom by May 15th for a month. Then set out white *Petunia* and *Salvia* plants, which flower by July 1st, and continue until frost. In the centre of the bed there may be a bird basin set on stone work, or a fountain or a sun-dial may be preferred.

Another plan is the Tulip and Poppy bed, succeeded by later annuals.

In this bed plant late Tulips in October; the next March sow annual Poppies, which will be ready to bloom soon after Tulips are gone; the Poppies and Tulips may be taken up by July 1st, to be replaced by plants of *Salvia*, Marigold, *Verbenas*, or any of the other transplantable annuals, which, if moved at this season, require daily plenty of water.

A SEPARATE PLOT FOR CUTTING FLOWERS

If it is possible, keep some place apart from the formal garden for growing plants that may be set in rows, squares, or masses for the express purpose of cutting the flowers for the house and of giving them away. It will not then be necessary ever to rob the garden of its glory.

XXIII

GARDEN PESTS AND REMEDIES

A CHAPTER FOR EVERY EMERGENCY

The insect pests which afflict plants are divided into two classes: those that chew the plant-food and those that pierce plant-tissue to suck the juice.

The Insecticides are therefore divided into two classes: those that kill when eaten, causing stomach poison, and those that kill by contact, i. e., either acting through the breathing pores and clogging them, or poisoning the body by absorption.

Insects of the *first class, killed by stomach poisons* such as the arsenites, are caterpillars, worms, and slugs. Insects of the *second class, killed by body contact* with oils, soap, or tobacco, are scales, plant-lice, leaf-hoppers, mites, thrips, red spiders, mealy-bugs, etc.

GARDEN PLANTS MOST COMMONLY AFFECTED

Roses, etc., with scale.—Give in *November* a treatment of kerosene emulsion 1 part to 15 parts of water, or whale-oil soap 1 lb. to 2 gals. of water. In *May* or *June* spray with weaker solutions. (For proportions see page 94.)

Roses, etc., with plant-lice, hoppers, mites, thrips, or red spiders.—Give *summer* treatment of kerosene emulsion or whale-oil soap, to which tobacco may be added. When insects infest the under part of a leaf, spray beneath the leaf, and repeat the application twice or thrice at intervals of a week.

Roses with worm in rosebud.—Use arsenate of lead or hel-lebore.

GARDEN PESTS AND REMEDIES

Roses with rose-bug or rose-beetle.—Give Bordeaux with arsenate of lead, and pick off the bugs, dropping them into a pan of kerosene.

Roses, etc., with slugs.—Use arsenate of lead or hellebore.

Roses, etc., with mildew or rust.—Give Bordeaux mixture, applied early.

Hollyhocks with rust or red specks on under side of leaf.—Spray early with Bordeaux mixture. Dig it around crown of plant. Destroy diseased parts.

Hollyhocks with green bug.—Use kerosene emulsion, also tobacco.

Delphinium with worm at root.—Lift the fading plant, find the worm, and reset plant in clean soil in which is mixed a little tobacco powder.

Delphinium and Monkshood with blackened leaf and flower.—Spray with Bordeaux mixture. Dig dry Bordeaux about the crown of plant.

Pæonies with blackening of flower-stem, and bud.—Spray with Bordeaux mixture. Dig dry Bordeaux in about the crown of plant.

Phlox, Pyrethrum ulig., Verbena, etc.—When leaves turn brown and shrivel spray the under side of the leaves with Bordeaux mixture one week and tobacco the next week.

Chrysanthemums with black aphides.—Use tobacco water.

Rudbeckia, Heliopsis, etc., with red aphides.—Use tobacco water.

Sweet Peas with red aphides.—Use tobacco water.

TREATMENT OF FRUIT TREES, SHRUBS, AND VINES AFFECTED

With scale.—Use in *July*, with spray, kerosene emulsion or else whale-oil soap. In *winter* use “Kill O’Scale.”

THE SEASONS IN A FLOWER GARDEN

With lice, thrip, etc.—Use tobacco or tobacco and soap.

With worms, etc.—Use any arsenical poison.

Plants seemingly affected with disease not understood may be sprayed weekly with Bordeaux mixture and arsenate of lead combined, or Bordeaux alternate with tobacco. If they do not improve dig them up, look for worms, cleanse the roots in a weak solution of Bordeaux, and reset in fresh earth with Bordeaux dug in about the crown.

Bordeaux mixture is not strictly an insecticide, but most insects avoid it. It is a fungicide.

Tobacco is one of the most useful garden remedies. Where it is not sufficiently efficacious combine it with soap.

Kerosene emulsion (or else whale-oil soap), Bordeaux mixture, tobacco, and arsenate of lead are sufficient for most gardens. Some gardens do not need any treatment.

INSECTICIDES

PROPORTIONS OF APPLICATIONS

Whale-oil soap.—1 lb. to 9 gals. or 2 oz. to 2 gals. of water in *summer* for *Roses*.

1 lb. to 7 gals. of water in *summer* for *shrubs, vines, and fruit trees*.

1 lb. to 2 gals. of water in *November* for *shrubs, vines, Roses and fruit trees*.

1 lb. to 1 gal. of water in *February* for *shrubs, vines, and fruit trees*.

Kerosene emulsion.—*Summer* application for *shrubs*, 1 part to 15 parts of water, i. e., 1 pt. of the emulsion in 2 gals. of water.

Kerosene emulsion.—*Continued.*

Summer application for *Roses, etc.*, 3 fluid oz. to 2 gals. of water.

Winter application for *Roses* (with scale), 1 part to 15 parts of water.

Buy at a chemist's a gallon bottle of prepared kerosene emulsion. It will last some time for a small garden.

Kill O'Scale.—*Winter* application for *trees* and *shrubs*, 1 part to 20 parts of water.

Whale-oil soap and tobacco.—Use decoction of 2 oz. of whale-oil soap and 1 lb. of ground tobacco in 2 gals. of boiling water, cooled before used on summer plants.

Bordeaux, dry.—Can be dusted on wet leaves or dug in about the crown of the plant.

Bordeaux mixture (powdered).—4 oz. of Bordeaux powder in 2 gals. of water.

Tobacco decoction.—1 lb. of ground tobacco steeped in 1 gal. of hot water, cooled and sprayed on.

Tobacco powder is sometimes dusted on plants, and when dug in about the roots of trees or plants affected with root-lice it is beneficial; it also acts as a fertilizer.

Bordeaux mixture and arsenate of lead.—1 lb. of arsenate of lead to 25 gals. of diluted Bordeaux mixture, or, for a small quantity, mix 4 oz. of Bordeaux powder in 2 gals. of water, to which add 3 dr. of arsenate of lead.

Hellebore is sometimes dusted on, but is preferably sprayed, using 2 oz. to 2 qts. of boiling water, afterward adding 2 qts. of cold water.

Arsenate of Lead.—3 dr. to 2 gals. of water.

Sulphide of Potassium.— $\frac{1}{2}$ oz. to 1 gal. of water.

Apply poisons with bellows, whisk-broom, or watering-pot.

THE SEASONS IN A FLOWER GARDEN

CUT-WORMS AND WIRE-WORMS

Signs of cut-worms may be detected when the plant withers and topples over, cut or partly cut in two just below the surface. Find the worm about one-half inch under the soil, probably near the base of the injured stalk, sometimes within it, and kill it. Encircle plants with fine range coal ashes, slightly dug under the soil, not touching the plant, or place paper collars or thin shingles around the base of stem, two inches under and one inch above ground. For a bait to destroy the cut-worms, use fresh clover dipped in arsenate of lead and syrup, and cover over with an inch of soil.

Wire-worms feed on roots. They may be treated with poisoned clover bait, or tobacco powder may be dug in about the roots.

Where mice are giving trouble, sprinkle sulphur.

XXIV

SOME NOTES ON POPULAR PLANTS

Aster—the showiest of the annuals. Fed twice with wood ashes and refreshed by occasional showers or watering, the varieties of three periods—early, midway, and late flowering—will furnish bloom from August 1st till frost, if the beetles are not allowed to destroy them. Try, first, *Pæony Branching*, *Giant Comet*, and *Superb Late Branching* varieties.

Aster, hardy—Ornament the wild garden as well as the home garden in late September when flowers are scarce.

Anemone Japonica—Is better for slight shade. It generally dies if transplanted in autumn.

Althæa Shrub—Its growth is easily disturbed by spading in about the roots; use white and pink varieties. They make an excellent boundary line for a garden. If a severe winter partly kills an *Althæa*, cut it back and it will start again.

Aconitum Napellus (Monkshood)—Requires partial shade. It is not long-lived, and is subject to a disease which blackens the leaf and flower.

Arctotis grandis—Upper side of petal pure white, under side lilac. Unless each plant is staked, grow them apart from smaller plants, or the latter may be smothered by them.

Bachelor's Button—The true "Bachelor's Button" is the little yellow *Ranunculus acris* of May and June.

Bluets—A long bloom may be had by continual cutting of the flowers. They are sown in September or early spring.

THE SEASONS IN A FLOWER GARDEN

- Balsam—Should be planted in the sun in rich soil, and watered in time of drought. Grow the Camellia-flowered variety, set them fourteen inches apart. Start them under glass.
- Coreopsis lanceolata—Cut back after each successive bloom, it will give an abundance of flowers till frost.
- Chrysanthemums, hardy—Do their best in the full sun, and against a wall or a house, in soil that is rich and rather stiff. Pinch off their tops to make them bushy. Divide large clumps in spring.
- Cosmos, late—Stake them when young, tie them monthly, and pinch back once or twice.
- Cosmos, early—The flowers are smaller, but they are very satisfactory for cutting all summer.
- Campanula, medium—The best of the Canterbury Bells is the Calycanthema (Cup and Saucer). It should be wintered in a frame if the climate is cold.
- Clove Pinks—In severe winters spread some manure over the ground beneath their foliage. (Near New York they are rarely protected.) They may be increased by cuttings, and also spread themselves by root, a small plant soon becoming a large clump. They are the sweet-scented variety and bloom only three weeks.
- Dahlias—May be set out May 1st, but if planted June 10th or later will supply bloom for the latter part of the season, when flowers are scarcer. In damp climate and congenial soil the plants require no special care. Where the bloom is disappointing, provide a richer soil, and allow but one stalk to grow on a tuber, and above all, *water* them. To grow them bushy, pinch back when one foot high. To have tall growth stake them early. Continue tying them when growing tall, as they break off easily in high winds.
- Dianthus Pinks—From seeds sown in March, they give two

SOME NOTES ON POPULAR PLANTS

summers of almost continuous bloom. The single Japanese Pinks are especially attractive.

Delphinium—Is sometimes troubled by a "black disease." When healthy it will live many years. Cut way back the flower-branch that is fading, and new bloom will come soon. In rich soil and if no seed-pods form, it blooms almost continuously till frost. In winter surround and cover the crowns with coal ashes to prevent attack of slugs.

Digitalis (Foxglove)—Decorates the garden for many weeks, and if the old flowers are cut off, another lower stalk will later come into flower. It is better to treat this plant as a biennial, as it is often killed by a cold winter.

Forget-me-not—In the sun it will die in time of drought if not watered. There is a variety which will bear the sun, *Myosotis dissitiflora*; the others need partial shade. Give light winter protection of leaves.

Glaudioli—Grow well in the Rose-bed; for a longer bloom, plant several sets of bulbs at intervals of three weeks apart.

Gaillardia, hardy—The variegated red and gold is the finest plant of this genus. It blooms continuously in light soil and needs protection in winter.

Garden Heliotrope—The old-fashioned, sweet-scented tall, white flower of late May and June. This variety is not often found at the nurseries.

Hollyhocks, h. p.—Treat Hollyhocks as biennials, because the younger plants bloom best. They require the deepest, rich soil, staking, and heavy winter protection. Cut the stalks down to the ground when they have finished blooming. When lifting them dig deep to get intact the long roots. Apply Bordeaux treatment early.

Hollyhocks, annual—This variety will flower about July 15th if the seeds are sown early in frame or window-box and

THE SEASONS IN A FLOWER GARDEN

transplanted out in May. They seem to be free from disease.

Heliopsis—Is often troublesome with its pest of red insects.

Hemerocallis florham—Is the early yellow fragrant "Lemon Lily" that blooms the 1st of June; another variety is the later tawny "Day Lily," *H. fulva* of July.

Hydrangea paniculata—Blooms August 1st, and for many weeks after. If it is severely pruned each year the flowers will be large and drooping with their weight. If pruned more moderately the flower-heads will be less large but more numerous, and the bush is a splendid sight.

Iris—The several varieties cover a long period of bloom, and they are always among the most effective flowers in the May-June garden. They require a light, rich soil, and are at their best by the water or in moist land.

Lupine—Does not transplant well after it becomes a large plant. It is injured by lime.

Lilium auratum—Dies out in two or three years, but is the most beautiful of all the Lilies. Some others that are hardy and long-lived are *L. speciosum*, *L. candidum*, *L. longiflorum*, *L. Henryi*, *L. superbum*, or Swamp or Turk's-cap Lily.

Lilies sometimes wither soon after the stalk begins to grow. Take up the bulb carefully, without breaking off the stalk, cleanse it, and reset it in fresh soil. If there are signs of mice or moles surround the bulb with cracked glass or sulphur, not touching the bulb, or in case of worms sprinkle a little dry tobacco two inches around and beyond the bulb, without contact, and a little more on the surface of the ground about the stalk. This treatment will probably save the bulb for next year's bloom. Lilies require watering and mulching.

A GRASS-PATH GARDEN, WITH A PERGOLA ON THREE SIDES.
Hamilton House, South Berwick, Maine.

SOME NOTES ON POPULAR PLANTS

Lilies-of-the-Valley—Require slight shade and rich and rather heavy soil.

Mallow, annual—Should grow in the sun, and rarely gives large flowers except in moist climate.

Mignonette—Needs moist soil and not too much sun. .

Nicotiana—Is easily grown, effective, and fragrant. Don't let the red variety grow next to red Salvia. It is an impossible combination.

Nasturtium—The climbing variety gives the finest flowers.

Orchid, wild—The flowers of this family are the favorites of the woods. The several different varieties, each under many names, make their immediate acquaintance somewhat difficult. Cypripedium,—Lady's Slipper, Moccasin-flower (the choicest of all), etc., rarely thrive after being transplanted from the woods. Buy them at a nursery.

Pæonies—The various varieties belong to three different periods of bloom—early bloom, mid-bloom, and late bloom—covering the season from May 20th to July 1st. To do their best, they need water, also rich, heavy soil, beneath them as well as around them. Their crowns are set three inches below soil. Disease rarely attacks them. They do not blossom much the first year after being moved. By September 1st every seven years each enlarged clump should be taken up, divided, and reset in fresh soil. The more manure, the better bloom.

Phlox—Avoid keeping the pale purple shades. Have plenty of the brilliant pinks, reds, and whites of both early and late varieties. To obtain new plants of choice varieties take cuttings of side shoots.

Pansies—Sown in early August, transplanted in September, covered in winter, will bloom, if picked frequently, from April 15th to July 1st. Trimmed back, then fertilized, and

not allowed to dry out or go to seed, they will continue their bloom till October 1st. Later blossoms are not as fine as early bloom. They should have partial shade and watering. Set them eight inches apart. For spring and summer bloom sow seeds the previous August. For full bloom in autumn sow seeds in May. Where climate is severe, winter them in a cold-frame, transplanting them to beds after April 25th.

Petunia—Grow the handsome fringed variety for gardens where quality rather than quantity is desired. Start it under glass. This kind requires staking. The common variety sown outside will fill up the empty spaces in a short time; but choose the white and pink shades, avoiding the magenta, and grow them somewhat apart from lower plants, or else the latter are likely to be smothered.

Poppy, Oriental—Is hard to kill. It may sometimes apparently die off suddenly, but wait six or eight weeks and a new growth of leaves will probably appear. The old flame-red shade is surpassed by the rich crimson Poppy, also by the new white and pink Poppies which bloom at the same time. It is impossible to be sure of reproducing these new colors from their seeds. Some gardeners have cut off a few inches of the root, with an eye (when reproduction was desired), setting this root in sandy soil in a cold-frame in early September, and a new plant has soon started. Move Poppies in September if bloom is expected the next year.

Poppies, annual—Rarely give the desired bloom except where there is some moisture of soil or a damp climate. They always thrive near the sea. The Shirley variety is the best.

Roses—Must not be grown in beds with other deep-rooted plants. Gladiolus, Verbena, or Pansies can grow around Roses.

SOME NOTES ON POPULAR PLANTS

- Rudbeckia purpurea*—It has a big pinkish flower and should be grown in the larger gardens.
- Rudbeckia* (Golden Glow)—Must be set between tall stakes or it breaks easily in heavy rains. It increases by root more rapidly than almost any other plant.
- Stokesia*—Grows best in light soil. It should be oftener seen.
- Stock*—With its fragrance, fine colors, and long bloom, should have a place in the front of every border. If potted October 1st it will often continue to blossom indoors.
- Salpiglossis*—Is an exquisite annual h. h. a. It is sometimes difficult to start, and is best sown in a frame or window-box, care being taken not to keep it too damp.
- Sweet Peas*—Need rich, deep, and rather stiff soil. Dig ten-inch trench. Put in three inches of manure on the bottom of trench and tread it down firmly, then two inches of good, rich soil pressed down, then sow a row of the seeds. Cover over with two inches of fine soil sprinkled over heavily with sheep's manure, and three inches more of soil sprinkled over with more sheep's manure. The seeds will then be five inches under ground; if sown as soon as the frost is out of the ground they will strike down and make strong roots and come up in due season. To give long bloom they must be frequently picked, and in a dry climate they should be mulched and watered. Keep the earth level over them that water may not run off. A wire trellis is neater than brush for their support.
- Snowball*—The old-fashioned bush is so liable to disease, which soon destroys its beauty, that the Japanese *Snowball* has taken its place. The latter is not as large or as free-flowing. There are other desirable varieties.
- Silene*—This old-time annual of late May lacks the popularity it deserves. It is generally sown in late August in the bed

THE SEASONS IN A FLOWER GARDEN

where it is to grow, and the young plants survive the winter with the protection of a few leaves. A thinning out in April is necessary.

Sweet William—Lives about three years. In winter leaves and some manure should be tucked in about the stalks, holding them erect without covering them over completely. They are placed near the front of beds. Cut them back a little after first bloom and they will blossom again.

Snapdragon—Though called a hardy perennial, it rarely seems to survive a winter. It is best to treat it as an annual, started under glass; give sunshine and plenty of fertilizer.

Scabiosa Caucasica, h. p.—Grows too rapidly to be placed very near other plants.

Scabiosa, annual—Takes up little room, and should be grown in masses as close to one another as five inches for support.

Valeriana, red and white—Have delicate flowers in June and later.

Valerian—Is a name given to a tall-growing, white, fragrant, old-fashioned plant of May and June; called also Garden Heliotrope.

Verbena, mammoth—Needs full sun and some water. The plants grow low, and should be massed together by themselves.

Veronica—Requires staking to keep it from lying over on surrounding plants.

Yucca—Requires sunshine and some space for the new growths that come up yearly from the parent stock and adjoin the old plant, which blooms only once. Transplant new growths in April.

Zinnias—In the tall double variety the rose, yellow, and white

SOME NOTES ON POPULAR PLANTS

are preferable; the single, also dwarf double salmon-rose varieties are popular. The new dwarf Zinnia Red-Riding-Hood, one foot high, is most desirable on account of its color and compact growth, and is an effective plant to grow as an edging at the front of a bed.

XXV

DON'TS

Don't transplant annual Poppies and Candytuft. Sow where required to grow, and thin out.

Don't relax watch for scale, beetles, worms, etc., on plants and trees.

Don't let manure come in contact with bulbs or roots.

Don't crowd Roses into beds with other deep-rooted plants.

Don't dig around roots of the *Althæa* bushes, or they will be injured.

Don't cover over completely in winter the whole plants of Sweet William, Foxglove, Clove Pinks, or other plants retaining their foliage.

Don't risk planting perennials after October 15th. They are apt to die as a result. Experienced gardeners may often do it successfully, but amateurs had better not try it.

Don't plant anything but Hollyhocks and Sunflowers in straight rows; low border edgings also excepted.

Don't forget to watch for ripe seeds if you desire to preserve them.

Don't try to enrich poor, sandy soil.

Don't wait to see Rose pests before spraying.

Don't fail to stake and tie plants that require it.

Don't fail to weed and loosen the ground about plants.

Don't fail to water plants in the dry season.

Don't forget to give Asters a dose of wood ashes after setting them out, and again August 15th. Hardy Chrysanthemums also bloom better if given wood ashes.

DON'TS

Don't forget to look for black beetles and yellowish bugs on Asters after July 25th, and to remove them by picking and killing.

Don't hesitate to pick freely of the flowers to encourage further blossoming. At least remove the fading blossoms.

Don't let plants, in unpacking, lie exposed to cold or sun.

Don't allow them to dry out.

Don't break off the fine, fibrous roots.

Don't plant roots in a doubled-up position.

Don't fail to save wood ashes for the garden.

Don't forget to take up Dahlias, Cannas, and Gladioli after frost, and Geraniums and tuberous Begonias before frost, and to put them away dry, and safe from frost. Keep the Begonias in dry sand.

Don't transplant sod in dry weather.

Don't let the scarlet Oriental Poppy come next to magenta or pink flowers.

Don't move bulbs or plants of early summer, such as Daffodils, Pæonies, and Irises, until ten weeks after bloom ceases. It is during this period that they ripen and store vigor for another summer, and if disturbed they would be injured by summer heat.

Don't plant the Morning Glory vine near flower-beds; once started it gives more trouble than weeds.

Don't hasten to set out tender bedding-out plants, such as Geraniums, Fuchsias, Heliotrope, Begonias, before June 1st.

Don't hesitate to mulch those plants that are in the full sun and can't be watered in drought.

Don't prune shrubs except soon after they have finished blooming; however, when they are moved they require pruning back.

Don't destroy toads or birds, the gardener's best friends.

Don't plant trees, shrubs, etc., too deep, or they will not prosper.

THE SEASONS IN A FLOWER GARDEN

Don't keep cats or chickens. They give endless trouble in a garden.

Don't discard the Easter bulbs, Jonquils, Daffodils, Tulips, Lilies, or Rambler Roses, but plant them later in the ground; and

Don't expect much of them for at least two years, and not even then unless the soil is good.

Don't plant *Rosa Rugosa* and Trumpet vine too near flower-beds. The roots spread almost like those of the Locust.

Don't plant shrubs nearer than three feet apart; large shrubs five feet or more apart.

Don't forget that transplanted trees, like shrubs, must be trimmed back considerably.

Don't hesitate to thin out well all closely grown seedlings.

Don't weed gravel paths when you can spread coarse salt over them, which prevents growth of weeds. Use dry salt, or else brine, 1 lb. to 1 gal. of hot water.

Don't pick flowers without scissors.

Don't pick Poppies without a jar of water at hand to plunge them into immediately. They will live longer for this treatment.

Don't divide clumps of hardy plants by cutting through them, when the crowns may be pulled apart.

Don't fail to remove all leaves from the stems in water in a flower-bowl, to keep the water from becoming foul too soon.

Don't overlook this rule: Hoe the soil about the plants, keeping the upper two inches of surface loosened to save the under moisture from evaporation; this is called "soil-mulching," and saves the trouble of frequent watering of established plants; but when watering the garden, a thorough soaking once in a while is much better than a light sprinkling every other day.

Don't round and raise the bed above the roots of the shrub, nor make the flower-bed so high that the water will run off.

XXVI

BIRD-HOUSES IN THE GARDEN

Purple Martins, Bluebirds, and Wrens, and occasionally Titmice, will nest in houses made of wood and painted, but such houses must be somewhat weather-worn before the birds will make their abode there.

Woodpeckers, Nuthatches, Creepers, and Flickers will often occupy the houses prepared for them, provided they are made of hollow trunks or limbs of trees. A better way to attract these birds is to train vines over an old hollow tree instead of cutting it down; birds will nest also in the cavities of poles.

To attract Swallows, Phœbes, and Flycatchers, nail little shelves under projecting eaves, or on the rafters of sheds or open barns.

Purple Martins like the apartment-house, and a home containing several rooms can be built for them and placed at least twenty-five feet above the ground, preferably on the top of a barn or telegraph pole. The rooms should each measure about $9 \times 8 \times 8$ inches, the doorway $2\frac{1}{2}$ inches wide and $3\frac{1}{2}$ inches high.

Bluebirds' boxes are usually about $9 \times 7 \times 7$, with an entrance hole the size of a fifty-cent piece.

Wrens will nest in almost any box or cavity, and will barricade a large entrance with a matting of twigs if a door the size of a quarter has not been provided for them.

The doorway for Titmice can be a trifle larger than a quarter, or about $1\frac{1}{4}$ inches in diameter.

THE SEASONS IN A FLOWER GARDEN

Flickers and Red-headed Woodpeckers need to have the entrance hole about 4 inches in diameter, from 12 to 18 inches above the floor of the nest, and the space within about 7 inches in diameter.

The other Woodpeckers will live in homes of slightly smaller dimensions, with entrances from 2 to 3 inches in diameter.

Fasten a bird-house securely and at least twelve feet above the ground, against a house, limb, or post. Birds will not inhabit a shaky or leaky house. Set the house facing north or east. Do not let branches strike against it, but have shrubs or trees near by. There must be but one aperture to a nesting-box—much light is not acceptable. Bevel the edges of the entrance hole. Prevent the ascent of cats by fastening around the post or tree, just below the bird-house, an inverted, funnel-shaped piece of tin ten inches deep and considerably flaring at the lower end.

A basin or pool of water is a great attraction to birds. If there is no natural water-supply, set a shallow earthen tray (a flower-pot tray) on top of a five-foot post and in the shade. Change the water daily.

REMARKS RELATING TO THE GARDEN CHART

The plan shows a garden in bloom from May 20th till late September (latitude of New York City). The plants may be somewhat crowded, but staked and trimmed when necessary; they will not suffer from close planting if the soil is rich. A still brighter effect is possible in a larger garden. The massing of colors is impossible in a small space, but the bloom may be continuous, providing that some annuals, e. g., Zinnias, Salvia, Calendulas, Marigolds, Early Cosmos, and Petunias are started in March under glass, so that they may bloom early enough to succeed immediately the season of Delphinium, Foxglove, etc. The garden's planting scarcely becomes effective the first year. Few nurseries supply large plants. It takes a year or more for most young plants to become well developed. If the purse is limited, begin the FIRST year:

1. By buying only vines, Irises, Lilies, the Phloxes, and Gladioli.

2. Fill up the spaces with such annuals as Zinnias, Marigolds, Calendulas, Salvia, Early Cosmos, Petunias, Bluets, Shirley Poppies, Nicotiana, Portulaca, and Sweet Alyssum. These would be enough the first year if perennials also are to be raised from seeds.

3. Sow out of doors for another year the hardy perennials and biennials that are most easily raised from seeds. See list on following page. Next year buy the remaining perennials required.

The four small beds in the chart might contain a few more of the lower plants which are omitted for lack of space on paper. Add Tulips to centre bed.

A few names are abbreviated for lack of space.

Honeysuckle vines may be included on four sides of the garden if there is a fence.

The Phloxes not named, as *P. suffruticosa* and *P. Carolina*, belong to the tall later variety known as *P. paniculata*. The early white *Miss Lingard* is the favorite of the *P. suffruticosa* type. Use it freely.

Gladioli planted in early May, filling any vacant spaces in the borders, will help to give the bright colors in early July, when they are often needed in case the annuals are late in blooming.

Plant 8 INCHES APART—Sweet William, Lychnis, Achilleas, Ranunculus, Prim-roses, Gaillardia, Aconitum, Tulips, Pinks, Asters, Larkspurs Pansies, Helichrysum, Stocks, Vinca, Lobelia, English Daisies, Gladioli.

Plant 18 INCHES APART—Hollyhocks, Delphinium, Dictamnus, Oriental Poppies, Foxgloves.

Plant 12 INCHES APART—All the others.

Sometimes it saves room to set three or four plants of a kind in a triangle or diamond shape instead of in straight lines.

If lower leaves of Hollyhocks overshadow other plants, remove some of them. The curved lines over the entrances indicate vine-covered arches.

A SMALL, CHEAPER GARDEN

A small garden could be made attractive with plenty of plants in the following few varieties: Ranunculus, Columbine, Lupine, Irises, the Phloxes, Foxglove, Delphinium, Lychnis Viscaria, Sweet William, Gladioli, Campanula, Gaillardia, Coreopsis, Achillea Pearl, Platycodon, a few Lilies, and the annuals, Silene, Zinnias, Salvia, Marigolds, Lavatera, Cal. Poppies, Asters, Portulaca, and Sweet Alyssum. Most of them may be raised from seeds.

Rose vine.⁵ Hollyhocks⁶ Lily sup.⁵ Hollyhocks - Vine

Ger Iris	² Liatris	³ Celosia	⁴ wh. Phlox	² Lupin	² Jap Iris
¹³ Achillea	² Delphin.	¹ Veronica	² Celosia	² Foxglove	
¹ Yucca	¹ wh. Phlox	⁶ Lily cand.	³ pk. Zinnia	¹ P	
¹² Sweet William	² Platycodon	² F			
³ Lychnis visc.	⁸ Jap Pinks	¹ Ageratum			

Clematis	⁶ Salvia	Vine	³ wh. Phlox	³ Pentstemon dig.	³ Foxglove	¹⁰ Larks-pur.	¹ Phlox suff.	¹² Ranunculus	⁶ Dwarf-red Zinnia	¹² Late Tulips
² wh. Phlox	² Lupin	¹⁰ Larks-pur.	¹ Phlox suff.	¹² Ranunculus	⁶ Dwarf-red Zinnia	¹² Late Tulips				

² wh. Phlox	² Lupin	¹⁰ Larks-pur.	¹ Phlox suff.	¹² Ranunculus	⁶ Dwarf-red Zinnia	¹² Late Tulips
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² wh. Phlox	² Lupin	¹⁰ Larks-pur.	¹ Phlox suff.	¹² Ranunculus	⁶ Dwarf-red Zinnia	¹² Late Tulips
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Rose vine

[illegible]

Clematis = ¹Pyreth. ²V.
¹Phlox ²Jun. wing.
 Blueets ¹Delphin.
 Shirley ²Zinnia
 Poppies ²White tree
 Sues. by ³Phalyca
 Asters ¹o
 Anthemis ²Camp.
 Late Tulips ⁴Vinca

oosia	Clematis
Phlox	² rd. Phlox
foxglove	³ Lupin
linaria	¹ Veronica
rumicup.	Coreopsis
tan	penula
the tulips	Vinca

THE NUMBER AND COST OF PLANTS IN THE CHART

TOTAL COST FOR PURCHASE OF PERENNIALS (PLANTS) AND ANNUALS (SEEDS) \$47

If the cost of hardy plants is too much for one year, buy half the number of bulbs, which increase rapidly. From seeds then, raise some of the perennials, and of the rest—buy half of them the first year and half the next year. From seeds, too, the annuals may be had at a small cost.

PLANTS (H. P.) BY PURCHASE, FIRST YEAR. COST, \$20.

Quantity

- 4 Honeysuckle vines.
- 6 Rose vines.
- 3 Clematis paniculata.
- 24 White Phlox paniculata.
- 12 Pink Phlox paniculata.
- 6 Red Phlox paniculata.
- 12 Phlox suffruticosa.
- 16 Phlox Carolina.
- 12 German Iris.
- 6 Japan Iris.
- 12 Liliun speciosum.
- 12 Liliun longiflorum.
- 12 Liliun candidum.
- 6 Liliun Henryi.
- 6 Liliun superbum.
- 24 Gladioli.

PLANTS (H. P.) BY PURCHASE, SECOND YEAR. COST, \$14.

Quantity

- 36 Ranunculus acris fl. pl. and Persian.
- 12 Evening Primroses, Enothera speciosa.
- 18 Achillea tomentosa.
- 24 Platycodon.
- 12 Lychnis viscaria.
- 48 Late Tulips.
- 6 Coreopsis lanceolata.
- 2 Valerian officinalis.
- 1 Yucca filamentosa.
- 3 Pyrethrum uliginosum.
- 6 Pyrethrum hybridum.
- 4 Liatris pycnostachya.
- 3 Veronica longifolia subsessilis.
- 3 Pentstemon digitalis.
- 2 Dictamnus fraxinella.

PLANTS (H. P.) BY SEEDS, SOWN IN APRIL BLOOM THE NEXT YEAR. COST BY SEEDS, \$1.25. OR, COST FOR PLANTS, \$11.

Quantity

- 20 Hollyhocks.
- 24 Sweet William.
- 24 Campanula, medium, h. b.
- 14 Foxgloves.
- 14 } Lupins, blue, white.
- 14 } Lupinus polyphyllus.
- 10 Delphinium elatum, etc.
- 8 Delphinium Chinense.
- 8 Columbines.
- 8 Anthemis.
- 6 Oriental Poppies.
- 6 Lychnis Chalcedonica.
- 18 Achillea Pearl.
- 3 Aconitum Napellus.
- 12 Gaillardia grandiflora.

ANNUALS FROM SEED. COST, \$2.

Quantity

- 12 Zinnias of each shade, pink, white, yellow, dwarf red.
- *20 Salvias, red.
- 22 African Marigolds.
- 12 Calendulas.
- 8 Early Cosmos.
- 12 Japanese Pinks, Dianthus Hedderigi, h. b.
- 12 Chinese Pinks, Dianthus Chinensis, h. b.
- 4 Feverfew, double white.
- 8 Petunias, white.
- 36 Asters.
- *18 Celosia, feathered, red.
- 18 Larkspur.
- *12 Stock, ten-week Stock.
- *24 Ageratum.
- *24 Helichrysum, dark red.
- 18 Vinca.
- *12 Lobelia compacta.
- 24 English Daisies, buy plants.
- 28 Pansies, sow in August.
- 8 Nicotiana affinis, white.
- Sow in borders and thin out, Bluets, Poppies, Lavatera, Portulaca, Silene, Sweet Alyssum, California Poppies.

* Sow these more tender ones under glass in March and any others wanted for bloom as early as July 1st. Helichrysum and Asters will not bloom till August.

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*(The figures in italics refer to pages giving the plant's
first flowering month.)*

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