# ) i \& 8 <br> 3ixithent <br> <br>  <br> <br>  <br> Theris: 

 عk

,

$$
556
$$

## THE HERBACEOUS GARDEN

## ROCK GARDENS

## HOW TO MAKE AND MAINTAIN THEM

By LEWIS B. MEREDITH

With Introduction by F. W. MOORE, M.A., A.L.S. And an Alphabetical List of Plants suitable for the Rock Garden, with notes on the aspect and soil they require.

## From the Introduction

It is a practical work, written by a practical man about a subject which he thoroughly understands, and by one who has experienced all the joys and sorrows connected with the cultivation of rock plants and alpines. To ensure even moderate success in rock gardening two main points are essential : a properly constructed rock garden, and a reliable guide to the nature and requirements of plants to be grown on it. There existed a demand for a sound practical work, giving explicit and detailed information on these points, and this volume meets it.
"It is safe to say it is one of the best of the really practical works which have been written, and we can cordially recommend it to everyone who is embarking, or has already embarked, on this fascinating branch of horticulture."-The Gardener's Chronicle.

Demy 8vo, with Plates. Cloth. 7s. 6d. net; postage inland, 6a.

WILLIAMS \& NORGATE, 14 Henrietta St., Covent Garden, W.C.


ISABEL FORREST.
A MIXED BORDER
in the garden of the Hon. Mrs. Edward Lyttleton at Overstrand.

THE HERBACEOUS GARDEN

ALICE MARTINEAU

WITH AN INTRODUCTION BY
W. ROBINSON

AUTHOR OF "THE ENGLISH FLOWER-GARDEN"

LONDON


14 HENRIETTA STREET, COVENT GARDEN, W.C. I9I3

## MY HUSBAND

## PREFACE

The constantly recurring "I" in writing about gardening is most difficult to escape. Egotism seems almost unavoidable, as one's garden is the expression, outwardly, of one's own sense of colour and proportion.

I would commence by saying that many of the suggestions in this book are prompted by experiments and experiences gained in an old garden, worn-out and neglected when taken over, twelve years ago ; on a gravel soilwith the gravel very near the surface-which bakes hard in a dry summer, and is often very wet in winter. In spite of all this, it is now filled with flowers and plants growing so healthily and luxuriantly that visitors generally end up their little quota of appreciation with the trite remark, "But then, of course, your soil is so good."

And in addition to this garden, which is large, and worked by four men, I have during these twelve years planned the gardens of
three other houses belonging to us, and have taken great interest in their subsequent development. One of these is a medium-sized garden worked by a man and a boy; one a garden of about half an acre, with a man three days a week ; and one a still smaller garden, with a man one day a week for digging and mowing.

People often say to me, "How did you learn ?" I grew up in a garden, and inherited doubtless the love for it ; but I began gardening in a cat-walk at the back of a small London house out of Grosvenor Place, and grew, with some success, carnations, lilacs, and a few annuals, and such herbs as parsley and chervil. My next experience was a country cottage on stiff clay, with an acre of garden. Here I had a factotum who "did" the garden, chickens, etc., and here some of the said experience was bought at a price. I have always taken in gardening papers, and read all the standard books I could get, and I owe a great deal to Mr W. Robinson (the pioneer of present-day gardening) and to his invaluable books and gardening paper. I have also found sympathetic friends in France, Italy, and America, as well as in England, in whose gardens I have learned a good deal. And I have invariably found therein that lovers of flowers, whether
it be master or man, are ready to give the beginner a friendly hand.

Of all hobbies, gardening is the least tainted with the jealousies one meets with in the pursuit of other hobbies and recreations. It seems to make for generosity and good-fellowship the world over ; and it is surprising how a total stranger will share his treasures with a kindred spirit, and to what trouble he will go to assist a fellow-gardener.

An old adage says that the young live in the future, the middle-aged in the present, and the old in the past. If this is true, then gardening must keep one ever young, for there is always the future to look forward to, and indeed one must live in it. To be of any use one should have the vivid imagination that sees some glory-hole of the present "blossoming as a rose" in the immediate future ; and another useful thing to remember is, that the word "can't" has no place in the true gardener's vocabulary.

I feel naturally great diffidence in approaching a subject which has been so ably treated in other books. At the same time, there seems to be room for a handbook on herbaceous borders, which hitherto have been merely dealt with in books on gardening
generally. And as they have risen of late years to a position of great importance in the gardening world, this essay of mine, written by an amateur for amateurs, may meet someone's need.

I am most grateful to those friends who have so kindly sent me pictures of their gardens, and to Miss Margaret Waterfield, Miss Forrest, and Mr Mallows for drawings.

ALICE MARTINEAU.

## INTRODUCTION

Mrs Martineau has asked me to write an introduction to her book; and though she is well able to take her own stand among the flowers, I do so with pleasure in the hope of helping the movement. These plants seem to be coming to their true place in our gardens. When, many years ago, I began to disturb people's mind about them, there were few good compared with what there are now. The borders were poor and full of plants of little value, like the poorest of poor starworts, and plants of no character; but now the rich uplands of China, the beautiful plants of the American Pacific Coast and of Siberia and Southern Russia, are coming to enrich our shores. In the old days when people were wild about bedding out and its charms, we had many of the best old things, from the pasque flower to the white lily, thrown away to make the garden blaze with red geranium, blue lobelia, and yellow calceolaria.

The word herbaceous, like so many words that men use for convenience, must be taken as an arbitrary one, because the various classes of plants run much together, and there are numbers of hardy plants which are fitted for herbaceous borders which are really evergreen, like the rockfoils and evergreen candytuft. There must be no hard-and-fast line if we are to have the best of these plants. Good plants are so many and choice, that to make the best of them is the real question.

The mixed border always has been and will be the place to use them, and this book will tell us how to prepare the soil. But the planting is still more important.

The great number of borders in the country, both in the past and present times, are spoilt by "dotting" and "repetition." Plants that as single plants are unnoticed may when grouped be very beautiful. People who love a plant may often spoil it by putting it everywhere, as is sometimes done with the flame flowers. The true way is to group. Even the plans in recent books that tell us how to arrange mixed borders show twenty plants where seven grouped would be more effective. It is not only effect but simplicity of culture we should aim for. The gardener in the
spring and summer is often overworked ; and if he has to fight his way in mixed borders with dots everywhere, it is not half so easy for him as where he has good bold groups of each.

One should be very particular in making a choice. Much harm has been and is being done by cultivation of hungry plants that do not give good effect, like not a few of the American sunflowers, rapacious plants of not much beauty. Above all things avoid ugly plants and those that flower for a few days only, and those so coarse that you cannot put up with them when they are out of flower, like the day lilies. Where there is any room outside the garden in shrubbery, copse, or even hedgerow, a good way is to put such plants in a place where they can grow freely. In many cases I do this with stout geraniums, evening primroses, bergamot, and meadow-sweets.

The plan of filling up the border with annuals or plants to fill up gaps is not a good one, and shows that the border has not been well planted in the autumn and winter. At the same time, we should not hesitate to use a few other things if they come in, apart from herbaceous plants. Some long-flowering China roses form very pretty groups in the
mixed border and are quite right there ; and bulbs, though not strictly herbaceous, may also be effectively used.

There are very few soils in which more than three or four lilies can be grown with good result, and these may come into the mixed border and they will come up among the other things and pass away without leaving many blanks. The late Frank Miles, the artist, made a very good border in this way by letting his lilies grow through the herbaceous plants, covering the border with evergreen plants like the Christmas roses. Where there is any rough ground outside the garden proper one may use the coarser and stronger things with good effect, such as the Solomon's seal, the everlasting pea, and the oriental poppies, which will grow in the coarsest grass.

Backgrounds to Borders.-The question of background is important. People often use the yew-the hungriest one could use for this purpose. A yew-hedge is such a robber that half the gardener's time would be taken up in working against it. I have seen even the privet used, and that is the ugliest and the worst thing one could think of. The best of all backgrounds is a trellis on which one can train climbers, clematis, and various beautiful
things which go very well with hardy plants. I live in an oak country where we can make a trellis of split oak, and that is the most satisfactory of all. Chestnut wood, and even the ugly iron fence which disfigures so much of the land, may help by using it as a base for a trellis. In the cross spaces oak battens are divided up into smaller pieces with bamboos, and that forms a good and lasting trellis.

Colour Schemes.-There is some talk of those nowadays. They need never be thought of if we take care to have good plants which, grown in the natural forms, do not need the considerations given to schemes of carpet gardening. People who make tiles and coloured cottons and the advertisements which disfigure our streets, may have reason for thinking of semi-chemical laws of colour, but in the garden the most beautiful colour can only be got by natural ways.

W. ROBINSON.

## CONTENTS

## PARTI

## CHAPTER I.-THE SITE

Sun and shade-Background-Relation to surroundings_Proportion .

## CHAPTER II.-DESIGN

Importance of different treatment for each garden-
Description of several good plans-Gardens and borders of hardy plants22

## CHAPTER III.-SPADEWORK

Soil-Cultivation-Fertilizers-Right time for plant-ing-Division in spring to prolong blooming period-Staking-Tying, etc.$3^{8}$

## CHAPTER IV.-EXPENSES

Cost of plants-Labour-Suitable gardeners-Where economy has to be considered-A $£ 5$ border for a quarter of an acre garden56

## CHAPTER V.-COLOUR

Broad effects-Masses of colour-Juxtaposition and contrasts of colour-The difficulty in choosing colours as described in catalogues-Efforts made to counterbalance this by the use of R.H.S. colour lists

## CHAPTER VI.-THE MIXED BORDER

For a small garden-Importance of careful selection -Only the best varieties-The restraining of one's acquisitiveness-Grouping and names of plants-List and plan86

CHAPTER VII.-THE MIXED BORDER (contd.)
For large gardens-Arrangement of plants-Tending to repetition-Danger of allowing the coarser plants to overgrow the choice specimens Grouping, and lists of plants for foreground, middle distance, and background .

103
CHAPTER VIII.-ANNUALS AND BULBS
Use of other than strictly herbaceous plants-The impossiblities of keeping up an unfailing supply without these-Argument as to whether bulbs should be included-Directions for planting sameNames of bulbs that can be leftin border-Annuals -Cultural directions and colours-List of same

## CHAPTER IX.-ONE-COLOUR GARDENS

The arrangement of small gardens in separate colours is specially good where no variety of contour exists - A mauve garden enclosed by yew hedges-A pink and rose-red garden-An orange and yellow garden-A ghost garden-An evening garden .

## CHAPTER X.-BLUE GARDENS

Description of natural blue gardens-Of a carefully-thought-out garden-A blue terrace borderNames of suitable plants147

## CHAPTER XI.-THE MASSING OF DISTINCT SPECIES

Iris gardens-Michaelmas daisy gardens-Pæony gardens-Snapdragon gardens-Evening gardens -Lavender gardens
CHAPTER XII.-SPRING AND AUTUMN
Importance of sheltered and slightly shaded position -Winding walks_Main paths_List of plants suitable - Autumn effects - Golden glory - Brilliant colouring ..... I79
CHAPTER XIII.-MY HERBACEOUS GARDEN ..... 193
PART II
Alphabetical List of Plants suitable for growing in Herbaceous Borders ..... 217
List of Annuals ..... 286
List of Blue Flowers in Pure Tones ..... 289
List of Delphiniums tried at Wisley, 1912, and which received Awards of Merit ..... 289
List of the Best Phloxes tried at Wisley, 1908 and 1909, and which received Awards of Merit or Mention ..... 291
LIST OF ILLUSTRATIONS
A Mixed Border (in colours) Frontispiece
Entrance to Herbaceous Garden, Hurst Court ..... 8
The Lower Terrace Border, Hall Place, Shackleford ..... 18
Yew Hedges and Trellis, Hurst Court ..... 24
View of the Duchess of Westminster's Garden, Eaton Hall, showing paths ..... 30
Duchess of Westminster's Garden, Eaton Hall ..... 35
The Bachelor's Garden, Park Place ..... 42
In the Author's Paved Garden in Winter, Hurst Court, Twyford ..... 46

Lady Warwick's Garden, Easton Lodge . $\quad \stackrel{\text { to face page }}{46}$

$$
\begin{aligned}
& \text { Borders seen through a round arch, Evelyn Duchess } \\
& \text { of Wellington's Garden }
\end{aligned}
$$

Gypsophila, Phlox, and Shasta Daisy, Milton Court, Dorking ..... 62
Long narrow Garden enclosed by Yew Hedges ..... 68
Phlox and Hollyhock at Milton Court, Dorking (in colours) ..... 76
A Yucca ..... 80
Mrs Horne's Garden, Hall Place, Shackleford ..... 86
Raised Border with Rock Plants at edge in Mrs Greer's Garden at Curragh Grange ..... 90
Hollyhocks from a Cottage Garden ..... 96
Lady Evelyn Cotterell's Garden, Garnons ..... 102
Lady Evelyn Cotterell's Garden, Garnons ..... 102
Lupins ..... 108
Border in Evelyn Duchess of Wellington's Garden, West Green-Spring ..... II I
Lupinus roseus at Wisley ..... II 4
A Scotch Garden, Glenogle, N.B. ..... II 4
Annuals and Bulbs in the Herbaceous Border ..... I 20
Eremurus in the Garden of the Hon. Mrs Ernest Guinness ..... 122
Campanula persicifolia alba ..... 130
Bunch Primroses, Hurst Court ..... I 36
Evening, Hurst Court . ..... 140
The Blue Garden, Park Place ..... 148
Foxgloves, Milton Court, Dorking ..... 152
Spiræas, near water ..... I 56
Mrs Rait's Garden, Milton Court, Dorking ..... 172
Wallflowers and Narcissi, Hurst Court ..... I 80
Border at "Blazes" ..... I 88
Border in Evelyn Duchess of Wellington's Garden, West Green-Autumn ..... 192
Anemone japonica ..... 202
A small Stone-paved Garden, Hurst Court ..... 206

## PART I

## CHAPTER I

## THE SITE

> Sun and shade-Background-Relation to surroundingsProportion.

Few men are privileged to choose a site for their garden, for it is rare to find the man who builds the house he lives in. From the entirely wrong aspects of many gardens it would appear that the garden was an after-thought of the builder, who in many cases chose a hillside with a view, and did not particularly care if the garden were on a north-east slope or not. Occasionally in some very old house is found an ideally sheltered and sunny garden, and in many of the quite new houses the garden and the house are carefully planned with due relation to aspect. But the garden of the in-between period is just a haphazard affair that one makes the best of. Should one, however, be able to choose a site for his
garden, let him strive for a gentle slope to the south, and failing this, to the south-west, or the south-east. An eastern exposure means that the rays of the early morning sun after a frost will play sad havoc among the flowers. For, should the frost lie on leaf and flower when the sun shines out, they will look as though seared with hot irons. Whereas a south-west exposure means that a gradual thaw from the warmth of the air alone, before the direct rays of the sun have had time to get round, will do the buds of his pet pæonies no harm, while those planted on an easterly border will be blackened and shrivelled.

Choose high ground rather than low, for frosts are low-lying, and gardens brilliant with dahlias, salvias, and pentstemon may be seen on high ground in October when their neighbours, in apparently sheltered, but low-lying gardens, are black and finished off by perhaps one night's frost.

Should there be any hesitation whether to choose a sunny site or a shady, take the former. Sun is health and cleanliness to a garden-a purifier of soils; it means freedom from slugs and snails, mildew, etc., and ensures stocky and compact growth and brilliance of colouring. After a downpour the flowers
seem to shake the raindrops off and sparkle with renewed vigour.

But in the shady garden the rank luxuriousness of their growth degenerates into a dank vegetable mass, with little colour and no scent. Indeed, fine heads of giant mignonette in a wet summer are reminiscent only of cabbages.

So important does the sun seem to American gardeners, that a fine range of houses was pulled down recently at Hyde Park, Mr Fred Vanderbilt's beautiful home on the Hudson, because a belt of trees seemed too near, and they feared mildew. This in a land where the sun blazes down summer and winter. The glass houses there are even constructed of the lightest steel framing, no wood being usedto get all the light and sun possible. Here, in a comparatively sunless land, we do not take half the pains the Americans do to get light, not being sufficiently alive to the benefits of sun, and more and more sun.

Should the gardener-and gardener is used herein to mean the man who gardens, not necessarily the professional (amateur in its original meaning is a good description, i.e. "the lover" of gardening) - should the gardener become possessed of a ready-made
garden (a " matured" garden with the houseagent), the first thing he will have to do in nine cases out of ten, nay, in every case, is to let the sun in ; for it seems as if he who plants trees and shrubs is either blind to any imperfections in the creation of his brain, or else does not dare to thin out in the bold and drastic manner that is imperative after some years. Let him arm himself with saw, hatchet, and sécateur and go forth valiantly to let in the sun. It matters not whether the garden be small or large. In the former there will certainly be laurels to cut out, and privet to cut to the ground, and some more or less leggy shrubs and poorly grown saplings to remove ; while in the latter there should be vistas cut, and plantations removed, leaving only the finer trees, and either grassing right up to the bare stems (and what is there more beautiful than the bare stem of a tree-" the type of aspiration"?), or planting with some of the finer shrubs and noble herbaceous plants. This was done with gorgeous effect by the late Rev. Bulkeley Owen, who grubbed up many acres of laurels growing under fine deciduous trees, replacing them with coloured maples and flowering shrubs, and carpeting with plants, ferns, and bulbs.

Nothing shows off a fine border so well as a background of trees, and in the smallest garden there is generally an atrocious muddle called a shrubbery which may serve as a border when altered. I can recall a small front garden with such a shrubbery on one side and a laurel hedge on the other, and a round bed and gravel sweep in the centre! That garden was seized upon by a merry party one afternoon, and that tangled and unkempt muddle was hacked at, and grubbed up, and generally reduced, until all that was left was a fine, sweet-bay tree, a good laburnum, a couple of Scotch firs, a laurestinus, and some old apple trees. The ground was enriched, the laurel hedge opposite cut well back, and now that garden, small as it is, charms everyone who sees it. The front gate was removed and a quick hedge planted. The two old apple trees stand sentinels on a plot of grass in front of it. The gravel sweep has been squared and divided into a little garden of Dutch design, the beds all edged with box, and in and out of the old shrubbery have been planted great bushes of yellow and flame azaleas, iris in variety, from the small and fragrant early purple to big clumps of silver-edged flags, and tall white Florentine iris. A group of creamy spiræas toss their
plumes under the partial shade of the laburnum and some silvery-leaved pæonies of the oldfashioned cabbage-rose type, purple and rose hellebores, and luminous evening primroses extend under and beyond the fir trees. A border of good perennials is established in front of the laurel hedge on the other side, and yet the whole of it is not a tenth of an acre in size !

One would not plant a laurel hedge for choice. Cupressus macrocarpa, in lovely feathery green, is an ideal quick-growing background. Only in light dry soil, where frosts are rare, does it answer, however, and unless on the south coast or in some favoured spot, it were better to plant Thuja, nearly as good a grower, of a darker green and propagated easily from cuttings.

Yews form the favourite background at present in gardens, large or small. They are expensive and slow-growing, but in good, deeply trenched soil, and planted when 2 feet high, will make a fine hedge in ten years. ${ }^{1}$ Where space is an object, the small-leaved privet trained against a paling is good, and so is ivy on a wire screen. These hedges and

[^0]
Entrance to Herbaceous Garden - Hurst Court.
backgrounds are most needed in a flat country, as they give variation to a garden which would otherwise lie flat and open to the eye, and are even more important to a small garden than to a large ; for, if judiciously planned, an idea of greater space is attained. Think too of the contrast, nay, even shock, of passing from the glow and glory of a little garden 40 feet square, all of little box-edged beds, each filled with a different-coloured wallflower, in tones of primrose, orange, gold, and crimson, through a short tunnel in a thick yew hedge, out into a cool grey and mauve garden about 40 feet by 45 feet, with grey-flagged paths and an old sundial, a low grey wall and steps up to a bank facing you, and yew hedges on three sides; narrow borders following the blocks of yew and filled with mauve pansies (Maggie Mott), lavender, tall and short, and with Aubrietia graca and the new variety "Lavender" draping the walls and steps. Far more pleasure and effect is got by this treatment than from the ordinary garden 40 feet by 85 feet to be found at the back of many a small house.

Tamarisk kept clipped is an ideal hedge for a windy spot. It is deciduous, and does not look well in winter without its feathery foliage of vivid green ; but in any stormy, wind-swept
spot, even inland, it makes an ideal hedge. Where left unpruned the flowers of palest pink are very graceful, flowering in fluffy plumes in September. The tamarisk roots freely from any little cutting just stuck into sand. It likes a light soil.

Beech used as a hedge is handsome, winter and summer alike : in summer with its green leaves, in winter with its brown foliage hanging until the fresh leaves come. It needs clipping in early August to keep it thick and impenetrable. Clipped lime makes a good hedge too, but here the leaves fall. When the hedge has been established a few years and kept clipped, it makes a dense and impenetrable screen in the winter even without leaves. Both lime and beech have to be planted in a double row of young trees for the hedge to look their best.

What is known as a Sussex hedge is formed of beech and holly trees at intervals, two or three of each planted together, and is a pleasant piece of colouring in winter. The beech must always be clipped in summer if the leaves are to remain in winter, as it is only the youngest foliage that stays on.

In planting yew hedges the ground should be taken out to a depth of 4 feet, and filled
in with all the good soil, manure, charred refuse, and green refuse that can be found, and the young plants (not more that $2 \frac{1}{2}$ feet high for success) planted alternately in double rows, $\cdot \cdot \cdot \cdot$ Attempts to plant larger yews and so secure a full-grown hedge to start with are rarely successful. This I know to my cost, for a large load of beautiful yews 4 feet high and costing about $£_{1} 5$ were planted here one autumn in rather $\backslash$ dry soil, and hardly one survived.

All yews need heavy mulchings of manure in their earlier stages, and beyond a little pruning at the base and sides to strengthen their lower growth, should not be clipped until they are 4 or 5 feet high.

It is not generally known that a box-hedge can be transplanted even when it has grown to a good size, and I am always grateful to a chance acquaintance in some foreign hotel who shared his experiences in this direction with me. By carrying out his instructions, I was able some years later to move a very old clipped hedge from a cottage garden at some distance off my own garden. The secret lay in digging a fairly deep trench and putting good stuff at the bottom of it, and then to cut half through the stem of each plant of box
near the roots and bend it so that although the plant stood upright in the trench the roots were all spread along it. The next plant goes in on the top of the roots of the previous one. So that the roots instead of being spread out separately, which would leave a gap in the hedge above, lie along the trench one on the top of the other, enabling the plants to be close together above ground and in an unbroken line.

The relations to the surroundings must be taken into consideration when laying out a garden.

It is far better to do your best with the material at hand, than to strive for the unattainable. An example of what not to do is that of a new garden on a low cliff (exposed to every wind from the sea, with sand blowing in, and very bleak), where a sort of Italian terraced garden, copied, one would suppose, from Isola Bella, had been attempted. Pergolas with shrivelled and attenuated roses trembled in the wind, large vases and bas-relief boxes were filled with stunted plants of sorts that require warmth in which to luxuriate ; and though one could follow the idea of tumbling masses of ivy geraniums and bushes of heliotrope which the owner was fondly striving to produce, it didn't "come off,"
and never could be anything but a failure of pronounced type.

Now, had that rocky garden been wisely planted, it would have looked appropriate, if nothing more, and possibly beautiful. Valerian in glowing masses of red, pink, and white would have clothed the grey rocks; the sea campion would have tenderly draped their ruggedness with silver foliage and white flowers, and red, white, and yellow rock-roses would have climbed happily about, as on the Berwickshire cliffs. Half a dozen varieties of tamarisk would fling their feathery pink flowers tossing in the wind that it loves. Blue sea-thistles, yellow sea-poppies, sealavenders, sea - pinks (sweetest of all scented flowers), and many another would have flourished appropriately there.

Or again: how beautiful in a sandy or peaty soil would be a garden of cistus, white and yellow brooms, single and double gorse, heaths and heathers in all heights and colours, to say nothing of azaleas, rhododendrons, and lilies. While on that same soil a man might empty his purse and break his heart in vainly trying to grow exhibition roses and good border plants.

A gardener with any sense of proportion
could not make the mistakes one sometimes sees. As for instance a garden of vivid and crude-coloured annuals (that would have looked well with a near backing of a bluegreen holly hedge) grown on a bare terrace with no background but faint mauve mountains in the distance, and looking positively vulgar. Nor could he fill his garden with stone and cement seats, well-heads, figures, vases, and general oddments from a stone-mason's yard.

The sense of proportion that knows where to use one stone or lead figure correctly, with perhaps a block of trees immediately behind and a long vista of clipped hornbeams on each side, as at Down Hall, Harlow, is a valuable possession, and would never allow anyone possessing it to make the fatal mistake of trying to imitate a cemetery. Too many gardens are out of drawing, and need correction. To a trained eye, or to an artist, colour is not everything. Form and perspective are equally important, and are, alas! much neglected.

It is no more possible to give rules for that sense of proportion and form which some people lack, than it is to sense another person's perception of colour. I might perhaps implore
the reader not to disfigure a very small garden with a few lumps of shrubs which is his nearest approach to the massing effects of his neighbour's azaleas grown in many acres of ground, or I could point out the futility of trying to imitate the cypress walk at the Fiesole villa in a suburban garden. It is of no use for me to recommend the cutting of a vista through a thick shrubbery, though this is an excellent plan where the sky or some distant view can be seen (and not another house), as I have a mental picture before me of a garden where a vista cut through to the river beyond so delighted the owner that he cut vistas all round his lawn, and completely spoiled it by his peep-holes.

There is no royal road to this sense of proportion, and I can only suggest that different gardens of recognised beauty and charm should be studied till the student can discern the difference between good and bad grouping for himself, and knows instinctively when he has got his central round bed, or the pavement to his sundial, too large or too small for its surroundings.

A few plans of gardens which may be described as tried and proven may help the reader to form his own judgment, and possibly
the measurements may give an idea of right proportion. Even so they may not appeal to all. One of our great gardeners "can't abide" a clipped hedge, and while to others it represents all that is reposeful and most full of charm, an image of distortion is all that it presents to him.

A plan is given (p. 194) of my herbaceous garden, but were I to lay this out now, I should make all the grass paths 5,6 , or even 8 feet wide rather than 3 feet, which in a length of over 100 feet looks too narrow, though in a smaller garden it might be well enough. The grass walk below the wall is far more dignified in its width of 8 feet.

I was once taken to see what was described to me as an old-world garden in New York State. I had had an overdose of well-heads and marble seats, and was looking forward to the change. Never shall I forget my horror at being taken into a large expanse of garden laid out with stone and marble ornaments, statues, seats, well-heads, and looking like a mason's yard. I was then told that the yew hedges which had been the feature of the place had all died in the exceptionally hard winter, leaving the statuary, etc. (far too numerous anyhow), standing out in unrelieved nakedness.

At Lenox, U.S.A., excellent clipped hedges of spruce took the place of yew and holly and looked well-another instance of making the best use of the native material where, owing to climate, yews and holly fail.

The most charming gardens of all are those arranged on slopes falling away in terraces, but it must be admitted that they are the most costly to make. Of late a fashion has set in for a rounded bastion built out instead of continuing the terraces to the bottom, and five hundred pounds can easily be spent on a small garden of this sort, as the masonry and the moving of masses of soil is a heavy item. If the borders are not banked up by some retaining wall, the good soil will be washed down and away by any heavy rains. When a garden is on a slope, great scope exists for the making of glades, and most charming effects are thereby attained; but this is more for wild gardening purposes than for herbaceous borders, when it is absolutely necessary to terrace.

Some simple terracing, such as is seen in the small hillside gardens on the Riviera, is better for a small garden than more expensive designs and balustrades. There the borders, in which the carnations and violets for the markets are grown beneath the partial shade of olive trees,
are simply cut out as ledges, and banked up and supported by the nearest stone obtainable -chalk even being used,-and when draped with overhanging masses of rock-plants as an edging, is not be too glaring after the first year. It is wonderful to see the trouble taken to get deep cultivation in these gardens. I have seen gardeners at Lady Samuelson's garden at Beaulieu, standing in the trenches they were taking out, and only their heads and shoulders could be seen! But then never have I seen such purple clouds of violets as this deep cultivation produced-nor such carnations! Her hillside garden was in the simple formation generally seen on the Riviera, with no elaborate terracing. Certainly it was very lovely, and thoroughly justified the good taste of its owner, the most having been made of the hoary olive trees in their soft grey tones.

It is a great pity that no such garden as Bagatelle is at the disposal of the English public. Kew is such a mixture of the highest scientific research and the tea-garden. Everything seems so far away, the gravel walks so long and endless, while the interesting things always seem to be at the end of the great garden farthest from where one is, and there is never anyone to explain things. Bagatelle,

formerly owned by the late Sir Richard Wallace, is a pleasant drive from Paris, and the place is kept up by the French Government. The château is used for exhibitions of pictures, lace, and so forth, and also for music ; the lovely gardens are at the disposal of the public. Everything is done to encourage a love of gardening. You are made to feel when you enter that it exists solely for your pleasure and instruction. The Director and gardeners are there primarily for the purpose of imparting information to the casual inquirer. Even if you have no garden of your own, you are entitled to go there and take up as much of the Director's time as you can get, probably to learn something about the newest roses and their culture. For this is chiefly a rose garden, and the lovely lawns have been intersected in every direction by pergolas and pillars of swinging and trailing roses, lending lightness and grace to the hundreds of dwarf roses, in all the new as well as the well-known varieties that are massed in beds. The old walls are draped with the loveliest of clematis and flowering creepers, and, as long as you go there within the prescribed times, you will find someone willing-nay, anxious-to pour out rivers of knowledge as to their cultivation.

How delightful it would be were someone with a beautiful garden of this description to leave it to the nation, even as the late Sir Thomas Hanbury in his lifetime bought and presented a beautiful garden at Wisley to the Royal Horticultural Society, for the use of the Fellows.

Some garden far enough from a station to discourage the tripper, who thoroughly enjoys a well-earned holiday at Kew or at Hampton Court, but is not fired with a consuming ambition to quench his thirst at the founts of knowledge.

A garden where the beginner with perhaps a small garden, much love for it, and very little " siller," could go and ask questions again and again, sure of his welcome, and made to feel that the cultivation of his small herbaceous border, or his dozen or so of new roses, is as interesting a matter, and as deserving of careful attention, as if he were the grower of some rare orchid.

I wish that I might live to see this dream come true. I have known one or two such beautiful gardens, full of rare interest to the garden lover, and the result of some forty years of love and patience on the part of the owner ; and yet, on the death of that owner,
dismantled and the plants dispersed, in one case the garden broken up for building land, in another left without a tenant. Money alone cannot make a garden of this description. It requires years of knowledge and a true feeling for colour and grouping as well. In such cases as these, how splendid it would be were the Government to have the power to purchase for the benefit of the public such gardens, even if they are not close to a big town. Recreation grounds and parks are provided for the people of big towns, why should not gardens be provided for the purpose of educating that portion of the public who really improve the face of the land by their gardening?

## CHAPTER II

## DESIGN

Importance of different treatment for each garden-Description of several good plans-Gardens and borders of hardy plants.

No two gardens are ever alike even when both are designed by the same person-I will not say architect, for no architect worthy of the name would ever design two exactly the same.

Just as the individuality of the owner becomes stamped on his garden or manifested through it, so does the character of the garden need to be determined by its position, soil, and general physical features.

And consequently any particular plan, made for a given spot, and perhaps successful enough to be thought worthy of imitation, has seldom the same effect when slavishly copied and carried out elsewhere.

It is most necessary to study the contour, aspect, etc., and to determine to get the best results therefrom. The most that can be
hoped for from a collection of good plans, made for other gardens, is that the careful study of them will form one's taste and educate it, and so help one in the making of one's own garden. Given a few quiet hours with pencil and paper, compasses, a foot-rule, and the humble penny and halfpenny (for getting accurate rounds drawn on paper), the man who wishes to lay out his garden will find that, with their help and his own ideas (or those culled from the aforementioned plans), he is well on the road to the desired end. A gardening friend will generally advise on the plan when drawn out ; and, as the work of laying it out proceeds, the plan will be altered here and there, no doubt-and sometimes not much of it is left by the time all is finished. Still, he must start with some kind of design, and must know more or less what is required to be grown. The drawing should be made to scale, and this is easy to manage if quite simple lines are adhered to.

First measure your garden, and divide it with an imaginary division marked with a stick. Should the space you have at your disposal measure 60 yards by 20 yards, and as the scale of I inch to the yard, giving a plan 60 inches by 20 inches, is rather large
to work from, reduce it by 4. Mark out ${ }_{1} 5$ inches by 5 inches, and draw your plan. As long as you keep in mind that each quarter of an inch represents a yard, you will, by the aid of your foot-rule, obtain a tolerable working drawing for laying out your ground.

When it comes to the actual work, you will find a 4 -foot rod and a line with iron pegs necessary, especially for making a circle. Supposing you wish a round to be 12 feet across-unwind 6 feet of your line and drive the peg securely into the ground just where the centre should be. Then, with the line pulled tight, walk round at the full length of your 6-foot tether, and mark the circle as you go with pegs or sticks. A little practice and it will soon be easy to work with a line. The assistance of a practical gardener is a great help in the purely mechanical part of laying out a garden.

Sufficient use is not made in England of trellis work (treillage). It was used with wonderful effect in France in the days of Watteau, and helps many a town garden out of the commonplace, and to this day is still used a great deal by our French neighbours.

An ugly brick wall with a trellis of right design covering it, sometimes with pilaster and

Yew Hedges and Trellis - Hurst Court.
arched effects, is thereby changed into quite a good feature, when carefully planted with ivy or draped with wistaria. Trellis placed against the low wall at the end of a small garden, with alcoves or rounded recesses, will give an idea of distance.

A plain deal trellis in squares treated with carbolinium or anti-rot fades after a few months' exposure into a pleasant grey, the colour of weathered oak, making a better background than if painted, and is most suitable when the trellis divides two portions of the garden. When it is to go against a wall, it should be painted. A good grey-green is obtained by mixing a little white paint with what is known as middle Brunswick green. Something in the nature of a preservative is necessary. A trellis of this description is seen in one of the illustrations, dividing a one-colour garden from a great lawn fringed with old cedars. This one-colour garden, of which a plan is given on p. I 35, is planted entirely with mauve flowers, with the exception of four oblong beds which in the spring of the year, when the photograph was taken, were filled with lemon-white and orange-coloured primroses bordered with mauve pansies, and intermingled with mauve and silvery-pink
tulips. Another year these beds will have lilac primroses, aubrietia, and pansies for their spring dresses.

Should the garden be square, make a narrow oblong at one side divided off by either a hedge or a trellis with arches. Plant the wall on the side opposite the hedge or trellis right out with flowering almonds, peaches, and cherries. Have full herbaceous borders within the oblong and a miniature orchard on the other side of the hedge.

It does not seem possible to treat of herbaceous borders, particularly for the smaller garden, without taking the rest of it into consideration. When you live in a large place with any number of men to keep it up, the choice is naturally not so limited. There is generally to be found some long gravel path, bordered on one side by a shrubbery and on the other by lawn, where enough can be cut out each side to provide for a 10 - or even 15 -foot border.

A winding walk is sometimes successful, and a good example is seen at Harlow Hall, Essex, where the walk from the house to the kitchen garden curves partly round the house, and where there is a thick clipped hedge on each side, and a background of such climbers as honeysuckles, ceanothus, and clematis on poles in front of it-the whole being from 30 to

35 feet wide and screened from the tennis lawns by the hedge. Here the path is of gravel, as there is a good deal of traffic to and from the glass-houses to the house.

Sloping gradually from back to front, the borders were, in early August, filled with a beautiful selection of perennials, salvias, etc. Here much relief from congestion is afforded by a spring garden in another place, winding its way between trees and terminating in a sunny space sheltered from north and east by big trees, and where all spring and early summer flowers are to be found.

In many places, fine old-established herbaceous borders are to be found in kitchen gardens. Culloden House, N.B., has a notable walled garden of many acres, where each path, and there are a great many, surrounding and intersecting it, is bordered, their length totalling up to half a mile when carefully measured. Here most of the well-known plants are to be found, some of them, such as perennial candytuft, grown into bushes a yard through. Quite a notable feature in late autumn were large plants of a fine white and green variegated balsam of great beauty of foliage.

Given a large border, a suitable list of plants, good cultivation, and a good aspect (neither
north, north-east, nor heavily shaded), success is assured ; but in the smaller garden much thought must be taken. Those long lines and enchanting vistas, which owe much of their charm to great length, are out of the question. One may have instead a border to encircle the garden and so get quantity ; or one may have a glorified cottage garden, with box-edged walks, and a 6 -foot border, hiding one's vegetables, fruit trees, or croquet lawn ; or one can give up a certain space, preferably oblong, and devote it entirely to perennials.

It may be said at once, that the square-bed system is easiest for amateurs with but a limited staff. In Lincolnshire there exists a little stone-paved garden, surrounded by old and mellow brick walls, which is delightful. The space in the middle is entirely filled with square beds, some large, some small, from 7 to 10 feet square. The little walks in and out of the beds are paved with stone, and the walls are partly covered with roses and such creepers as jasmine, honeysuckle, and clematis, and there is a border of delphiniums, and yellow heleniums (for succession) at the foot of the wall.

Two of the beds were filled with phloxes, one with pale pinks, purples, and greys-which were probably Pantheon, Mrs Oliver, Iris, and

Miss Wilmot-and one at the further end flaming with Coquelicot, Etna, and G. A. Strohlein. Another bed was of tall mauve campanula (lactifora) with the smaller varieties as a foreground. A couple of beds were filled with hollyhocks, yellow, dark red, pink, white, semidouble, and with a frilly edge. Another was a mass of pampas grass, intermingled with spikes of scarlet gladiolus, and another of clematis Gipsy Queen, pegged down and restrained from wandering over the flagged paths, while Lilium speciosum was growing from among its purplevelvet flowers. Pentstemons of all shades were there, snapdragons, lupins, and many another flower to be used alone or to form beautiful combinations of colour. Much labour is saved by this plan; not so much staking or tying is needed, and you can more easily get round your plants to see them. Should some tree cast its shade over any portion, arrange that your shade-loving plants benefit by it, and have your garden-seat there. The beautiful landscapegarden effect requires more room than can possibly be afforded in the gardens this book is chiefly written for. But whether large, or small, a garden that is " out of drawing" is an eyesore, and the fault, when once it has been noticed, will constantly annoy you.

A couple of brick steps not set at the right angle to the paths leading to them, or a path of bricks to a garden tank that has not been set in line with the house wall near, are fearful eyesores. One garden, carefully designed at great expense by a well-known architect, is a source of great irritation to its owners. A centre had been arranged with a sundial and an enclosed space, with vistas through yew arches to tall specimen trees at both ends and on each hand. Something was wrong, and it was only discovered after some years, and when the yews had grown into fine hedges, that the line of the bouse ran slightly off the straight ; and though all the rest is quite correct in measurement, this one fatal mistake can never be put right.

A garden planned on formal lines needs to be very accurate and correct. Some of the newest gardens are really little gems of architectural design ; but unless home-made, and in a country where stone may easily be obtained, are exceedingly costly. And, though very beautiful, the setting is too expensive for most lovers of herbaceous plants. I will only mention one of these, which is carried out in small clumpy bricks beautifully laid in the form of the half of an amphitheatre, on the side of a
hill. What would be the seats of the amphitheatre, are broad brick walls, about $2 \frac{1}{2}$ and 3 feet high, and hollow, at any rate at the top, so that plants may grow in them. So that you see curving lines at different heights, and each plant is grown thereon for its scent alone. As you descend the wide and shallow steps, you brush against such sweet things as rosemary, verbena, bergamot, lavender, lemonthyme, and lemon grass, myrtle and allspice, and delicious waves of spicy fragrance are set free and fill the air.

In the same garden the herbaceous plants are not in formal borders, possibly owing to the contour of the ground, which is hilly. Here a pergola, covered with vines, leads by means of a succession of steps and small terraces to a point where you look out on to a large round garden, with sloping sides, entirely filled with flowers, perennials and annuals. One immense bed is in the centre, and from it other beds radiate with paths and crosspaths, the beds gradually spreading up the hillside. Here can be found pretty nearly every variety of perennial, together with such annuals as mallows, corn marigolds, coreopsis, cornflowers, Shirley poppies, and dahlias. The brilliance of the picture presented, after leaving
the cool depths of the pergola, makes a very striking and pleasing contrast.

A small attractive Elizabethan garden is being constructed now, with little raised square beds, and a brick well in the centre, the whole thing wonderfully carried out from a very slight design in an illustrated manuscript owned by Sir Frank Crisp, Friar Park, Henley. His Alpine garden so rivets the attention of visitors that, as a rule, these other gardens, gems in their way, are crowded out for want of, not space, but time.

Two beautiful stone-paved gardens are those respectively of Mrs Cornwallis-West and the late Mr G. F. Watts, R.A.

In each case a small farmyard has been converted into a flower-garden, flagged with grey stones, and small and ancient bricks. In the one, old millstones have been let into the paths, surrounded by cut bricks on edge, and on the old stone walls is a riot of roses-Carmine Pillar, Gloire de Dijon, and favourites, old and new, in the greatest profusion. Naturally, the soil is rich enough to promote rampant growth, while the sunny situation of each ensures well-ripened wood and masses of bloom.

In strong contrast to these rises a picture
of a very different type. A gatehouse in weather-worn grey oak, with thatched roof, a wide gate through which one sees stretching away for about a hundred yards a velvety grass walk with great borders on either hand -borders where the colours are so harmoniously and judiciously blended that each only serves to enhance the next ; where the sulphur toad-flax is planted in sufficient quantity to balance the vivid blue of a larkspur, and where the eye is led past cool grey breadths of Artemisia, and the delicate silvery mauve Galega rising from a sea of Shirley poppies, to more brilliant tones.

Another mind-picture comes to one of an old garden by the Thames, to which leads a covered way of Seven Sister roses, mingled with emerald, heart-shaped leaves of Aristolochia, while grassy paths lead on, through lines of larkspurs and tall white lilies, tangles of roses, and delicately scented tree-lupins, to archways in the old brick walls. These round archways, the bricks mellowed by time and softened by grey and yellow lichens, lead into three enclosed gardens. The first and smallest is all flowers, little lawns, and old apple trees. In the shade of a high north wall, where nothing else will grow, is a thicket of Heracleum, its 15 feet
of stem crowned with huge white blossoms. Roses galore, from the orange of William Allen Richardson, and the pale lemon of Céline Forestier, fill the opposite wall, and nestled into a group of tall white iris is an old Italian jar, with more iris planted in it.

The centre and largest garden is entered through another arch with an old wroughtiron gate, and has wide borders running down the middle, with grass paths, and hedges of Thuja, perfectly clipped, and, though only planted six years ago, looking as old as the walls. Its sombre, almost red, depths and high lights of vivid green make a fitting background for a splendid collection of delphinium in all shades of blue, from the pale Belladonna and Cantab to the richest ultramarines, indigos, and purples.

In the third and further garden the same grass walk runs through ; but here the borders are curved in the form of half-moons, each crescent filled with some special flower, Statice, white pinks, Gypsophila, Funkia (for its glorious foliage), spiræas, and many besides. Behind the Thuja and holly hedges were grown the unsuspected vegetables, and in large quantities too. This was an instance of an old country house with fine pleasure-grounds,


Duchess of Westminster's Garden - Eaton Hall.
but with no flower garden, until the walled gardens were turned into one under the rule of the present chatelaine.

In the same way the gardens at Eaton Hall, kept up at great expense for the benefit of visitors, were found, in their formality, to lack something of the charm necessary to a garden. So a square space was cleared in a wood at a little distance, a yew hedge planted on a terrace walk all round, and the paths, surrounding numberless square beds, paved with bricks on edge in herring-bone pattern, the beds being filled with May tulips, tea-roses, and other flowers. On one side a thatched tea-house stands on the terrace, and on the other a delightful pigeon-house. Here at once is a garden to live in, to read or work in, or in which to dream away the sunny hours,-far from gravel walks and aggressive lawn-mowers, and the incessant routine that is necessary in a garden open to the public on stated days. And in the gardens of Park Place, Henley, a small walled enclosure has been turned into the dearest little (very little) garden in which no one but the owner of it is allowed to garden. It has gnarled old fruit trees shading it here and there, and quaint old French garden-seats beneath them. It has an ancient sundial
surrounded by a tangle of beautiful perennial plants, many of which are old favourites long forgotten ; and it has an old-world character all its own, enhanced perhaps by the trim neatness of the adjacent and beautifully kept-up pleasure-grounds.

In closing this chapter one would like once again to impress "the importance of being earnest" on the would-be garden designer. Make up your mind what you want to grow. Have some definite object in view. You may be a collector of as many different varieties of a plant as you can get (there are ninety varieties of Salvia and eighty at least of primulas), or you may be merely an accumulator (a great difference between this and a collector !). You may prefer to go in for some distinct scheme of colour, or you may be satisfied with a heterogeneous mass which is only interesting to yourself. But if you want to have a distinctive garden, it is well to specialize, either in beauty, in interest, or in rarity. A garden has been recently planted where the owner frankly admits she knows nothing about gardening. "But," she says, "I have always remembered a garden I once played in as a child, and I have always intended to have one like it at the first opportunity." Her oppor-
tunity has come-the idea which has been crystallizing into definite expression for many years has at last been realized.

Great beds of lavender, pink roses, and Madonna lilies, with arches and swinging ropes of roses behind; nothing else. She has taken in part of a field in front of her house and laid it out in this way. Lilies, roses, and lavender-what could be simpler, more fragrant or more beautiful? Imagine those same beds filled with the hotch-potch of colours of the mere accumulator, and be thankful that people do exist who know what they want for their garden, and get it !

## CHAPTER III

## SPADEWORK

Soil-Cultivation-Fertilizers-Right time for planting--Division in spring to prolong blooming period-Staking-Tying, etc.

The perfect soil is good rich friable loam, and how rarely does one find it! If one has the great good fortune to be able to turn a field or portion of a field of old pasture-land into borders for herbaceous plants, how well and cleanly do they grow, and how the sight of the clean friable loam rejoices the heart of the lucky possessor, who perhaps has hitherto been doing his best with some sticky, wornout garden soil. In fresh, turfy loam manure is not needed in such quantities, and it merely wants a careful supervision for wireworms. If carnations and pinks are to be grown, gaslime, or one of the worm destroyers, such as vaporite, should be used, though traps of potato, carrot, etc., may $_{3^{8}}$ be set at night and
thoroughly examined in the morning. Clay soil gives much more trouble, especially if of a poor brashy quality; but no one need despair. It is only a question of patience, hard work, and the determination to grow plants well, that is needed, and even the difficulties of a clay soil can be overcome.

Clay soil is always cold, because it retains so much moisture. Draining alone is insufficient; it is necessary to lighten the soil above the drainage, in order to allow the moisture to escape. Clay soil, cold and wet as it is in winter, bakes hard and cracks in summer heat, consequently letting the heat get down to the roots of plants growing in it, and killing them by over-evaporation. To obviate this the soil must be improved, and made more open by the addition of burned soil, charred vege-table-refuse, mortar-rubble, etc. The latter is exceptionally valuable, as the lime contained in it is a plant food as well.

If the border is to be made on stiff clay soil, it will be best to thoroughly drain it first, by means of land drains, or broken bricks set 2 or 3 feet deep to carry off the surplus water. It is the combination of cold and wet that kills plants in the winter, and it will be understood that water stagnating round their roots will
quickly freeze in severe weather and so rot and kill them.

Plants on a dry soil will stand many more degrees of frost than those on cold clay, owing to the porosity, and consequent freedom from damp, of the soil. Undrained clay will often only grow the coarsest and rankest of perennials, until thoroughly worked and improved.

A border raised some twelve inches above the surrounding ground, with some stones or clinkers as a foundation and edging, is an excellent plan ; and even Eremuri will survive the English climate, if planted on such a border, as well as snapdragons and other half-hardy plants. The finest snapdragons seen this last wet summer had been thrown out on to a heap of rubbish, chiefly pea-sticks. They flowered magnificently, owing entirely to the excellent drainage and consequent dryness of their position. Manure placed in contact with the roots of a plant is apt, in wet soils, to rot them, and should be placed lower down.

Mortar-rubble is most useful to lighten a clay soil, which should be well trenched, two or three spits deep (a spit being the depth of the spade), and, failing mortar-rubble, ashes or leaf-mould or burned clay may be used to lighten it. In trenching (for the benefit of
the amateur), all soil taken out of the first trench should be wheeled away to the other end of the plot or bed. When starting on the second trench, you will then have the empty trench to fill as you dig the second. Then is the time to incorporate your rubble, ashes, soot, horse-manure, or wood-ashes with the soil to lighten it ; always trying to keep the top soil near the top, and not burying it at the bottom of the trench, for it is the top layer of soil that is the most worked and the best. The bottom of a clay trench should always be well broken up, and it would do no harm to bury in it broken pottery or glass, if broken up small enough, to assist drainage. All the trenches are dug in like manner, each being filled in turn from the next one. When the last one is reached, the heap wheeled from the first is then ready to fill it.

To burn clay requires a carefully made fire, made on the plan of a smother-fire of weeds, so as to burn gradually and slowly. The clay will then pulverize, and will be most useful for lightening heavy soil.

Gravel and sandy soils may be treated much alike. They both need vegetable matter, or humus-something to counteract the porous nature of the soil, and to retain the moisture.

For these soils farmyard manure (pig or cow) is far better than that from the stable, being heavier. It is a good plan to bury any green stuff such as lawn-mowings, dahlia-tops, and pea haulm at the bottom of the trenches; or if this green stuff has been turned, and laid up in a heap for some time, well sprinkled with lime, it may be mixed with manure and used nearer the top. Some really fine growth of yew hedge was attained in ten years at Hurst Court by taking out 10 feet of gravel, which was used for roads, and filling in the deep holes with all the soft stuff that could be collected in the garden, together with manure and refuse of vegetable sorts, pressing well down, and replacing the soil that was at the top of the gravel.

On chalky soils much the same treatment may be carried out, always endeavouring to get as much good soil as possible by judicious mixture of vegetable and animal refuse for the top spits, and well breaking up the bottom.

For a sandy soil where there is what is called a hard pan at the bottom, i.e. a layer of a kind of iron-stone almost impervious to water, if it is impossible to get sufficient labour to break up this hard pan, it has been found that the sowing of a mixture of such

To face page 42.


The Bachelor's Garden - Park Place.
coarse-growing things as chicory, and burnet, and cocksfoot, will in time break up this hard pan, by means of their long, thong-like roots, which aerate and penetrate it, and so create a drainage for the soil above it.

A very poor and stony border, planted with cabbages, or rather with the remains of cabbages, had stalks and leaves and roots all turned in one winter. That border in a couple of years became the best in the garden, and of good rich dark soil. Care must be taken not to dig in seeding weeds, as the seeds retain their germinating power for many years. Should a large heap of vegetable refuse be found when taking possession of a garden, do not spread it as a top-dressing, but burn it, or treat it with quicklime and bury it at the bottom of a deep trench-otherwise weeds by the million will be the result.

Peat-moss litter is good stuff for light soils, and sawdust, if turned into a farmyard after use in the stables, and well trodden in, or made into a heap and turned twice, is used with excellent results in market-gardens.

Good kitchen-garden soil will grow most things, but it gets overworked and sticky, sometimes from too much treading, and then the only thing to do is to dig and trench it
thoroughly, and aerate the soil in so doing. The same is often the case with an herbaceous border that has not been re-dug for some time.

Lime is of enormous value, and is not nearly enough used. It sets free the humus from previous manurings that has not been taken up by the plants, and if a good dressing is given, it not only saves manuring an old border, but adds greatly to the brilliancy of colouring, and seems to prevent the plants running to leaf instead of flower. It greatly helps a damp and sticky soil, by making it more friable, and, curiously enough, is equally valuable to a poor or dry soil.

Quick-lime should be used, and sprinkled over the ground until it looks as though a slight fall of snow had fallen. November is a good time to apply it, for the damp soon slakes the lime. If there is any danger of its touching tender growths of plants, it should be slaked first, i.e. put into a heap and damped down a day or so before using.

Gas-lime is very powerful, and should only be used on a vacant plot. It should be applied at the rate of three pecks to a rod of ground, and should be well broken and evenly distributed in the autumn. After being exposed for a month, it should by that time be well
pulverized, and may be raked and then dug in, but not deeper than a foot. By being mixed with the top soil, it will be more likely to destroy the various insects or fungus, and will wash lower down with the rain. It will be safe to sow seeds or plant in February or March if this is done in the autumn. There is a good deal of sulphur in gas-lime, which makes it more potent than quick-lime to destroy fungoid growths.

The refuse from acetylene gas is valuable also, and may be safely dug in at any time instead of quick-lime.

Leaf-mould is most useful as a mulch applied in early spring, protecting young growths from keen and cutting winds. A mulch of well-rotted stable manure may be applied to some of the coarser-growing plants such as delphiniums and phloxes, in May or June.

A border well made and thoroughly enriched should not require remaking for four years or more ; but it is desirable to cut out portions of the various large clumps every year or two, with a spade, filling up the empty space with well-rotted manure. Weeding must be attended to with care, and slugs should be diligently searched for with traps of little
heaps of bran, to be examined with a light in the evening. Also by placing empty orange or banana skins about (which catch the very small slugs), to be carefully examined in the morning. Or by the use of a light dusting of soot and of lime, or by sprinkling sanitas powder at the roots of the plants. Edgings, both of plants or box, are apt to harbour slugs, and should be well dressed at the roots once or twice a year with one of the above.

If the soil is a heavy, retentive clay, it is best to defer planting until the spring when making a border for the first time. This enables the ground to be thoroughly trenched and " thrown up rough " during the winter, for the frosts to break up, pulverize, and sweeten it.

A hot soil, such as gravel or sand, had better be planted in October and early November, while the soil is warm enough for the roots to take hold and get established. If left until the spring, even a short spell of drought, such as we often experience in May, would prove trying, if not fatal, to a plant whose roots had not " taken hold," and would entail constant watering. If you are replanting an old border, it means, of course, that a good deal of beauty has to be sacrificed. Many flowers such as the large white daisies, heleniums, and so

To face page 46.


In the Author's Paved Garden in Winter, Hurst Court, Twyford.


Lady Warwick's Garden - Easton Lodge.
forth, are at their best in late September and early October. But a border is not dug and trenched in a day, and one must be prepared to sacrifice some of the beauty of one's garden in order to get in the precious plants before heavy rain or hard weather sets in. In November delays are bound to occur, for though trenching may be done in the rain, planting cannot be undertaken until the soil has dried and settled somewhat, lest it get sticky, and lose that friable quality so valuable to root-growth. This does not apply to planting a stray plant or so, which with proper care can be done really at almost any time.

In hot, dry weather, if a "treasure" has to be put in at once, the best way is to make a hole of the desired size and water the hole well, then plant the treasure firmly, watering it afterwards; and, last of all, draw some fine dry soil over the surface, keeping the moisture in thereby. Stirring the surface gently with a hoe in dry weather is better than watering, which cakes the soil and prevents evaporation. If watering has to be done, a good plan is to give a thorough soaking and then mulch with peat-moss litter. The mulching also keeps the weeds down. In the drought of igira splendid bed of phloxes was kept going by
making some holes with a crowbar, three round each clump, and pouring water down the holes, and then mulching lightly with peat moss. Phloxes are the first to suffer from dry weather, but these kept their freshness and beauty when all else was dried up in the other borders.

In order to prolong the season of flowering, or to get flowers for exhibition that were over long ago in the ordinary garden, it is the practice of the nurseryman to replant some of his stock in March or later; and this plan might be followed with advantage by others. Pyrethrum, for instance, if moved in April, will have its flowering delayed at least a month; and no doubt many other perennials, if fibrousrooted, could be treated in the same way, and their period of blooming considerably extended.

To provide a succession of bloom is the great difficulty in the way of those who wish to see their borders always gay, and is one that is not always overcome. A first-class gardener once refused a place with very high wages, because he was told he would have to keep the herbaceous borders a mass of bloom for six months of the year. He said that it could not be done unless he were allowed unlimited glass, under which to bring things on in pots,
to plunge, or plant out, as other plants went out of bloom ; and as he felt that he could not fulfil the condition laid down by an employer who had no knowledge himself of anything beyond bedding out, and was only wishing to start borders, he preferred not to attempt the impossible.

A good deal can be done with bulbs, annuals, and lilies to carry on a succession of bloom, but it is far better not to attempt too much. Most of us try to get a show of bloom from April to September. But how many succeed in getting a really good border?

In how many borders are there not large blanks, and dying foliage? How much better it would be if one would be content with a small spring garden or border elsewhere, and keep the herbaceous border in perfect condition from July to September.

Occasionally Hampton Court is cited to one as an instance of borders that are perpetually in bloom ; but few suspect the continuous work of replenishment that is going on, and the number of men and glass houses and frames required, to achieve the really admirable results seen there. You may see one week a long border of white campanulas, carpeted with Viscaria cerulca in full beauty. Pass by three
weeks later, and you may see a garden truck, laden with pots of Lilium longiflorum just blossoming, and another of Lobelia cardinalis and white stocks. All are brought on in pots or boxes and planted quickly to replace the campanulas and Viscaria (which was sown in heat in March and pricked out in May), the lilies being plunged in their pots. After a month, these again may give place to summerflowering chrysanthemums, and even Michaelmas daisies, either lifted from the nurseries or in pots.

But to expect the average gardener to do all this is quite useless. He is much too busy over potatoes and other useful things such as fruit-picking. Lucky border that even gets carefully staked and tied in the summer months!

Delphiniums, the pride of July, are untidy things when their month is over; if phlox, Campanula lactiflora, heleniums, etc., are planted near, the gap is not so noticeable. But if some solid clumps of pæonies, sweet rockets, oriental poppies, doronicums, and such early flowering things have been given a fair share of the border, there will not be room for the later flowering ones. For if you restrict the number of the latter, you
will only have a few bright clumps in an otherwise bare border all through the summer.

In a very small garden one can have the delicious jumble of a cottage garden, where every plant is a personal friend to be cared for and watched, but a large border is very difficult to "do" really well for five or six months of the year. If it is planted so as to be at its best from the middle of June to September, the bare appearance of the earlier months can be avoided by carpeting in autumn with pansies and forget-me-nots, with some bold clumps of tulips and daffodils. These will be out of the way, or have died down, and will not interfere with the perennials when they come on later.

A great difference of opinion exists as to whether it is better to leave the old flowering stalks of perennials until the autumn or to cut them down.

Those who advocate the first-named plan maintain that to cut down the stalks without letting them mature is to destroy the vigour of the plant. Others, the writer included, prefer, or perhaps find it necessary, to cut the stalks down, to prevent the untidy appearance after flowering, and to make room for later plants to be staked out. It is certainly better
not to cut right down to the ground, but to leave from 9 to 12 inches, both for purposes of identification and to give the stalks and leaves a little chance to mature growth. This plan has been found not to weaken the plants, which yearly make luxuriant growth, and in a favoured summer will, even in the case of delphiniums, throw up late bloom. Should any weakness be feared, it is always easy to top-dress, or feed with weak stimulant in the way of manure water. Soot-water, made by soaking a small tied-up bag of soot in a tub of water, is also excellent for this purpose. It seems to enrich the colour of the foliage more than any other stimulant.

Staking and tying-out perennials is an art in itself. Gone, happily, are the days when a length of twine knotted to a stake and the bunching up of a clump of flowers into a bundle was thought to be all that was necessary. It is as well, perhaps, to be able oneself to arrange a plant in such a way that it will withstand a gale of wind and a storm of rain, and yet to show it off to the best advantage, for this is the one thing that cannot be left to " just anyone." Much patience is needed, and year after year the same lessons have to be given.

Borders seen through a Round Arch,


The most successful method tried so far in my garden is one that originated with Evelyn Duchess of Wellington, in her charming garden at West Green. When the plants, chiefly large clumps of tall-growing kinds, are about a foot high, a ring of wire-netting, varying in circumference and height, according to the width and height of the clump, is arranged round it, with three stakes threaded in and out of the netting and driven firmly into the ground. This has the disadvantage of looking hideous for a short time, but the plant soon grows up, and the leaves and shoots push their way through the meshes of the netting (necessarily a wide mesh), entirely hiding it from view. This seems to make a solid base for the clump, completely wind-resisting, and looking far more natural than any ordinary staking. Three feet was the width of the wire-netting used for delphiniums, but the size of the ring depends on the size of the plant. The wire-netting should be some inches away from the plant, and the mesh large enough for the leaves to grow through. For a large old clump of delphiniums, 3 feet through and 3 feet high would not be too much. For phloxes it might be 2 feet in height, and the width according to the number
of shoots and size of plants. It needs to come about half way up, and when the bloom is over can be rolled up and put away till another year, or moved on to another plant.

Another much-advocated way is to insert feathery branches in and round the clumps, while they are beginning to grow ; but this has not always proved a success in a heavy wind, as it seems difficult to get branches stout enough to bear the strain. It answers well for smaller plants, however.

The old way of stout stakes driven into the ground is a very good one if a sufficient number of stakes are put in, and each shoot is looped up separately, three or four shoots being looped up to each stake independently of each other. This entails much labour and quantities of tarred twine, green tape, or raffia, as the case may be, but is eminently satisfactory in the end.

A wonderful example of staking was seen in Mr Williams' garden at Lanfair one year, when clumps of the pink aster, St Egwin, had been so carefully and artistically trained and guided, by means which presented no evidence of their existence, that from a distance they looked like clumps of rhododendrons edging the drive, and were rounded
masses of flower without a stake or a stalk to be seen. Pea-sticks of birch, instead of hazel, are useful for staking, bamboo of all sizes, and ordinary bavins cut in half are good for stouter work.

This process of tying-out and training cannot be got through in the beginning and then left (unless where the wire-netting rings have been used) ; but again and again, in the course of their growth, must this be gone over, and sometimes ties undone and retied in fresh directions.

It is really amazing to note the difference that good or bad staking makes. It is particularly noticeable in the case of Artemisia lactiflora, which, when bunched up together, makes no effect, but when carefully tied out to invisible supports of bamboo, does not look like the same plant, and shows forth the full grace of its feathery, cream-coloured plumes.

## CHAPTER IV

## EXPENSES

Cost of plants - Labour - Suitable gardeners - Where economy has to be considered-A $£ 5$ border for a quarter of an acre garden.

It is quite impossible to lay down any laws on this subject, for the cost of plants depends on whom you go to for them, and varies as much as the cost of seeds. Prices vary according to the locality, price of labour and land, and whether the nurseryman you patronise has, or has not, established his name by costly advertisement and long-established merit. Many of the prices asked by him are ridiculously high in proportion to the value of the plant. Many perennials are as easily and cheaply produced from seed as are annuals, and are worth pennies, not shillings. Some nurserymen give you large clumps for the same price as small bits cost at other nurseries. The man who is buying his herbaceous border at so much per 10 square yards, or, say, $£ 5$ per yard
run 12 feet wide, has an entirely different viewpoint to the man who has $£ 5$ in his pocket and wants to have a border of hardy plants ; or the woman who hasn't any money but a few shillings for seeds, and who yet gets one.

In the first case, since he can afford to pay a large price, the one thing he cannot afford to do, is to wait. His border must be made and be full of bloom the first season. The rich man can't afford patience, consequently clumps at the "reduced" price of $£ 5$ per 100 are planted in masses to get some effect the first year. This chapter does not deal at length with this class of border, beyond giving one plan, and the estimated cost of a border 300 feet long by 12 feet, to show what can be done by a local nurseryman who has not yet established his fame as a specialist. It proposes instead to cater for the man with the $£ 5$ note in his pocket, who is content with a small border to begin with and who has infinite patience. The first thing to reckon on is the infinite generosity of gardening friends; so glad are they to entangle some fellow-fly in the same web of enchantment that has enthralled them, that they lure him on with promises, generally followed up with gifts. We have all heard of the couple who started
a herbaceous border, and whose friends all promised them hampers when dividing time came round. The hampers arrived, but each was filled with London Pride!

However, this is a rare case.
Generally one can count on collecting from friends a valuable, if miscellaneous, assortment of plants ; and unless the garden is newly made, you are certain to find in it some perennials already established, with which to make a start. Prices vary in different parts of the country, but in one or two good nurseries within five miles of my home I find that the prices of perennials range from 6d. to is. A great many, in fact most of them, are 6d., and in a very few instances, such as the newest delphinium, they may go up to 2 s . or 2 s . 6 d . But these newest varieties are, first of all, unproved, as a rule ; and, secondly, are no better, to the beginner's eye, than the older ones at 6d. and is. So that, taking an average, one can count on getting quite 150 clumps for one's £ 5 order. Often a special offer at reduced prices from some overstocked nursery means that good plants can be bought for 3s. 6d. a dozen. I have a list from one of our best hardy-plant nurseries offering such good things as Anemone Whirlwind, erigerons, heleniums,
and Iris germanica for this low price, and Anchusa Dropmore for 4 s . a dozen.

The cheap advertisement written in glowing terms and specially designed to catch the ignorant, is to be taken with that pinch of salt so healthful for beginners. Some of the things offered may be healthy stock and true to name, but often bitter disappointment is the lot of the gardening ignoramus who is attracted by the wonderful descriptions and prices to match. Sales by auction in country towns are not much good either. Often the plants are hawked about from one town to another, and are so shrivelled and weary at the end, that they never properly recover.

Order your plants from some reputable nurseryman. If he is your neighbour, so much the better ; and try to get them home in September or early October. You will find that the clumps of most of them will pull to pieces and divide into three or four pieces again. Do not cut them with a knife or spade, but pull apart, or use a blunt chisel to help you. Plant these pieces carefully in good soil, and in the spring, say in April, if you take them up you will find that in some cases you can divide again into three. Each of these pieces will flower, and by planting them
a foot apart you will get a large mass of wellgrown branching stuff, instead of one small and crowded clump, which would have been the case if you had left them undivided as they came from the nursery gardens.

Last autumn I bought two plants of that grand new aster Climax, and by dividing into little pieces when it arrived, and again in the spring, I had three splendid groups of it this autumn, groups consisting of three or four plants; and I have even been able to give away a clump.

Asters and phlox are particularly suitable for division in this way; and indeed it is imperative to grow them in small pieces, planted out annually, to get the best results. Delphiniums are best divided in early spring, unless on a very warm, sandy soil.

A plant of anchusa can be increased by cutting up the roots into pieces of 2 and 3 inches long in early spring, and replanting in boxes in cold frame, and will give you any number of plants. But if left to itself, it will die out in a year or two.

A plant like Santolina incana, grown for its grey foliage, only needs pulling apart with the fingers, and each twig will grow if firmly planted.

Now and again one comes across a taprooted thing such as Gypsophila paniculata, which defies all efforts at division ; but as a rule, with care and patience, quite a little stock of plants can be got in a year from one good bought plant.

Much can be done by taking cuttings at the right time. Aubrietias should have cuttings taken from them directly after flowering. Here you can get a dozen plants at least in a year from one. Phlox canadensis also is best propagated by cuttings after flowering ; so are pentstemons when not grown from seed. The cuttings are struck in a cool hot-bed, one that has been used for early potatoes or cucumbers. Early-flowering chrysanthemums should be broken up into innumerable cuttings, each with a bit of root, and planted in a cool hotbed in spring till well rooted and then planted out, each plant that cost 6d. to is. in April making ten or twelve more the following April.

Enough has been written to show that with patience and care $£ .5$ will make quite a good border in twelve months, or by the second season's flowering.

When, in addition to this, perennials are raised from seed, a few shillings make one rich.

One of the prettiest gardens in Wales is owned by Mrs Flora Annie Steel, and she will not have any perennials that she has not grown from seed herself.

Seeds are best sown in April if the soil is light, on seed-beds, as for annuals, pricking out when large enough; but if the soil be heavy, sow in boxes of sandy soil, placing them in a cold frame until the seedlings are strong enough to prick out on a border that is not burned up by the sun all day. Whether sown on open ground and pricked out, or in boxes, the plants should be large enough to plant out in the autumn, and in many cases will flower the next summer.

Seed of Campanula lactifora was sown here when ripe -about September, - and some plants left in the seed-bed were in bloom the next summer, though only a few inches high. Some seedlings take time to flower, but then the plants are so sturdy and grow into such magnificent specimens! The habit of a plant from seed is quite different to that of one grown from a cutting, it is so much more bushy. With some lavenders this is especially noticeable. The foliage of the seedling is greener and healthier, and it is a splendid bushy little plant, in great con-

Gypsophila, Phlox, and Shasta Daisy - Milton Court, Dorking.
trast to cuttings of the same age here, which are woody and spindly, and will never make a hedge. Scabiosa caucasica will not succeed in some gardens unless grown in this way from seed.

Among the plants that can well be grown from seed are the following :-
Aconitum (Monkshood), Agrostemma (Rose Campion), Anchusa italica (Bugloss), Anemone japonica, Anemone St Brigid and Coronaria, Aquilegia (Columbine) and hybrids, Asperula (Woodruff), Asters (Michaelmas Daisies), Aubrietia, Bocconia, Campanulas, especially lactifora and persicifolia, Centaureas, Centranthus (Valerian), Chrysanthemum (Shasta Daisy) and Single Chrysanthemums, Clematis, Delphiniums (Belladonna seedlings), Dianthus in variety, Echinops, Epilobium alba and rosea, Erigeron, Geums (Mrs Bradshaw was raised by an amateur), Gunnera, Helenium, Helleborus (Lent roses), Heracleum (Giant Parsnip), Heuchera, Incarvillea grandiflora, Tritoma (Redhot Poker), Lathyrus (Everlasting Pea), Linum narbonense and perenne, Lobelia cardinalis, Lychnis, Lythrum (Loosestrife), EEnothera (Evening Primrose), Onosma, Oriental Poppies, Phlox, Physalis Francheti (Japanese Lantern), Primulas, Pyrethrum, Ranunculus, Salvia ringens and Tenori and virgata nemorosa, Scabiosa caucasica, Statice (Sea Lavender), Trollius (Globe-flower), Verbascum (Mulleins), Violas (Tufted Pansies), Violas Cornuta varieties.

And from seed there is always the chance of getting something new, some colour not known before, or some variety in form or habit, for even when artificial cross-fertiliza-
tion has not been effected there are always the bees and the butterflies to assist.

The cost of labour in preparing the border will vary according to the soil and locality, for wages differ greatly. A man at from 3s. to 5 s. a day can, in light soil, dig and trench ( 3 spits) 2 chains a day if he is a hard worker. With a stiff clay soil to contend with, he could hardly dig $\frac{1}{2}$ chains. If, in addition to this, he has to clear the soil of couch grass, or bindweed, or twitch, he will do even less.

Stable or farm manure varies from 3 s . to 5 s . a load according to locality.

So, in addition to $£ .5$ for plants, we must reckon $£_{\mathrm{I}}$ to $£_{\mathrm{I}}$, ios. for labour and manure, and for seeds.

Where no regular gardener is kept the owner must either plant the border himself or get a jobbing gardener in by the day, superintending it himself. The nurseryman from whom the plants are bought will usually send a man to plant them for a price rather higher than that of the jobbing gardener, and it is well worth paying a little more to have them well planted, and also to see how it is done. Firm planting is the great secret, and to have the soil in the right condition, neither too wet nor too dry.

Once having seen a plant put well and firmly into place, it is an easy thing to do so alone in the future.

Gardeners' wages are on the whole very inadequate. Much is expected of them ; not only hard and constant work in all weathers, but knowledge and artistic feeling, and taste.

Has so much as this ever been expected in any other line of life at a guinea a week? Enlightenment is gradually overcoming prejudice. Now and again one comes across an oldfashioned example of real narrow-mindedness, but it is dying out.

Some years ago I had almost engaged a head gardener, when I mentioned that I liked to grow my asparagus and early salads on the French system; whereupon he, in righteous indignation, declined the place, saying, "Do you think I'm going to waste my twenty years' experience in gardening on learning new-fangled rubbish ?"

A lady gardener was not an unqualified success. She worked hard enough for ten, rain or fine, and got on well with the men under her, even taking her turn at stoking. But she had not enough practical experience, and did a good deal of damage during her short stay.

My most successful gardeners have been foremen from big houses seeking their first place as head. They are content with a moderate wage to start with, and are thoroughly up to date and good growers; but naturally they go on to bigger places with more glass, carrying my good wishes with them. They perhaps do not understand the cropping of vegetables for succession as well as the older head gardeners, but they are far more enlightened, and are generally glad to try new ways.

To return to the wages question. 30s. to 35 s . is counted a good wage for a head gardener with eight or nine men under him. Perhaps a cottage and coal and vegetables are given in addition. But he has the entire responsibility and anxiety of a big place, the hot-houses and fruit-houses and forcing-pits. He needs to be a good business man, as often there is fruit to be marketed; and yet he has to have an insight into things artistic and beautiful. He must be a good disciplinarian, and manage his men well, to say nothing of finding them. He has had a long and arduous training from boyhood in many branches, and yet he gets considerably lower wages than a chauffeur who has perhaps learned his business by driving for six months, and who (not a mechanic,
mind you) is getting 35s. a week, furnished rooms, and clothes.

It is a wonderful thing that these able, intelligent men can be found for a payment so out of all proportion to their ability, and only intense love for and interest in their profession can account for it.

The man or woman milliner getting an $£_{800}$ a year salary is no cleverer at combinations of colour, and has none of the other qualifications so necessary to a gardener. Little wonder that they die poor men, often leaving wife and family totally unprovided for. The average wage for a single-handed gardener is 20 s . or 2 Is . a week, and cottage, vegetables, and perhaps fuel. The man with a couple of under-gardeners will get 23 s. to 25 s., and the under-gardeners begin usually in country places at I 5 s. a week, rising to I 8 s . ; but there is no margin for saving on this nowadays. A careful, economical man will save his employer money in many ways. He saves his string, he keeps a basket for old labels, giving them a coat of white paint on wet days, instead of buying new. He will make his own carnation stakes out of some lengths of wire twisted three or four times round an iron rod and cut off, so forming the coils to support the stem.

He will save seed when possible from his own good stock, often getting a better strain thereby than if he bought them; he will take his pea-sticks under cover directly the flowering is finished, and keep them for another season, and will pull up all stakes as soon as possible, instead of leaving them out in the rain. He will use soot water and liquid manure instead of ordering the more expensive compounds from the nurseryman, and he will prolong the life of his tools by seeing that they are kept clean and dry.

He will save the manure bill by digging in all green refuse, instead of burning it, and gets it quickly out of the way; and if he has to have a smother-fire, he will save the valuable wood-ash before it is spoiled by rain, and will store it up with his compost heap.

But if this instinct is not in him, the instinct of preservation rather than destruction, you will find that any effort to implant it is looked upon either as a useless fad, or as mere parsimony.

It is not easy for a gardener and his master to look on things from the same point of view, especially where it is a question of herbaceous plants ousting bedding plants. Sometimes one is inclined to wonder whether the owner is not the true gardener, and the professional

the master. The whole question from both standpoints has been admirably dealt with by the writer of those very able "Studies in Gardening" which appeared in the Times. He pointed out that to the professional, brought up to strict routine work and imbued with fervent admiration of "the florid health of his begonias and the enormity of his chrysanthemums," his employer's ideas are the result of ignorance, and he despises him in his heart for his demoralising habits and his predilection for common plants of coarse growth. The gardener's friends admire geraniums, but his master's friends don't, and so there is a veiled feeling of antagonism. But the gardener is only acting up to his highest convictions of what he thinks is best.

I think this feeling is dying out, in the large gardens at all events. The single-handed gardener who dreamed of his geraniums and his bedding out, by day and night, still clings to his ideals of what constitute beauty, tidiness, and utility. But things are settling down a little since small formal arrangements of little beds and square gardens have come into fashion. It is being found that a garden of this sort, planted with cannas, begonias, heliotrope, scarlet lobelia, geraniums, fuchsias, in
a carpeting and dot-plant system, is very effective and beautiful for a good many months; and as the gardener has this little bit to be proud of, he is more content with the new fashion of hardy plants in herbaceous borders; particularly where he is allowed to use such things as calceolarias and begonias to replace the forget-me-not and arabis carpet of spring. Or to place bold groups of cannas and salvias to give some needed colour to a corner of a herbaceous border that is not too entirely conservative of habit. Satisfaction is a grand habit to cultivate. If your man does violets well, be thankful, and considerate if his mushrooms fail. If you get a constant succession of green foods and salad in a hot summer, set it off against red spiders having devastated the melons. It is better to do one thing well than to attempt too much ; as the nigger song says, "If you're just a little pebble, why, don't try to be de beach."

## List of Plants for Border in $\frac{1}{4}$-Acre Garden and their Position.

(Price 6s. per dozen unless stated differently.)
Achillea Ptarmica (The Pearl) Middle row.
Anchusa, Dropmore
Opal
7)
. . "
Sempervirens . Front row.
Jap. Anemone, Whirlwind, white . Middle row.

Jap. Anemone, "Alice," rose Middle row.
Anthemis tinctoria, "Kel-
way," yellow.
Aquilegia (Columbine) cœru-
lea, blue, pink, yellow . Front row. 3s. doz.
Arabis fl. pl., white . . " 3s. "
Artemisia lactifl. . . . Back row.
Asters, acris, mauve, early . Middle row.
," Amellus, violet blue . "
\% Climax, mauve, late . Back row. 9d. each.
" St Egwin, pink . Middle row. 9d. "
" Top Sawyer, mauve,
early . . . Back row.
Tradescanti, white,
late . . . Middle row. 9d. "
Campanula persicifolia grandifl., white . " 9d. "
glomerata, purple Front row. lactiflora, lilac, white . . Back row.
Catananche cœrulea, blue . Middle row.
Chrysanthemum (Shasta Daisy)-
" MrW.Robinson, white "
" Summer-flowering . Front row. 3s. 6d. doz.
Carrie, yellow.
Goacher's Crimson.
H. H. Crane, chestnut.

Madame C. Desgranges, white.
Madame M. Masse, lilac, pink.
Nina Blick, orange. Perle Chatillonaise, cream. Rabbie Burns, salmon. Sally, coral. Canada, single salmon. Chastity, single salmon. Formidable, single pink.

Coreopsis Eldorado, yellow . Front row.
Delphinium Belladonna, light blue . . Middle row.
" Persimmon, clear bright blue . Back row. Is. 6d. each.
Hybrids, etc. . $\quad$ 4s. 6d. doz.
Dianthus (pink) ; Mrs Sinkins, white - . . Front row. 3s. doz.
Digitalis, hybrids, white . Middle row. 2s. "
Doronicum austriacum, yellow "
Echinops Ritro, dark blue "
Epilobium alba, white . . Back row.
Erigeron grandiflorus, violet .
Middle row.
Front row.
$\begin{array}{lll}\text { " } & \text { aurantiacus, orange } & \text { Front row. } \\ , & \text { philadelphicus, pink } & \text { Middle row. }\end{array}$
Funkiä Sieboldii, glaucous
leaves, lilac . . . Front row.
Gaillardia compacta, yellow and red
"
Galega alba, white . . Back row. 4d. each.
" Hartlandi, mauve . Middle row.
Gaura Lindheimeri, pink, white
Geranium pratense, violet blue " '" fl. pl. . Front row.
Geum, Glory of Stuttgart, orange-scarlet
" Mrs Bradshaw, crim-son-scarlet
Gypsophila paniculata, greyish white fl. pl. white 9d. "
Helenium superbum, yellow . Back row.
Helianthus, Miss Mellish, yellow

Hemerocallis flava (day lily),
yellow . . . Middle row.
Hesperis, white and purple " 2s. doz.
Heuchera, Edge Hall, rose Front row. sanguinea, crimson 99
Iberis Correæfolia (Candytuft), white "
Incarvillea Delavayi, rose "
Iris, Common Blue Flag . " 3s. "
" Purple King . . "
4s. "
Iris pallida, mauve . . Middle row.
Florentine, white . . Front row.
Kniphofia (Tritoma, torch flower) aloides grandiflora, orange, scarlet, yellow . . Middle row. 9d. each.
" rufa, coral and scarlet . . Front row. 9d. "
Lavandula (Lavender) spica, grey purple . Middle row. 4d. " Munstead var., dark purple . Front row.
Linaria dalmatica, yellow . Middle row.
Linum narbonense, clear blue Front row.
Lunaria alba, white . . Middle row.
2d. "
Lupinus arboreus, yellow . Back row.
" " white . "
" polyphyllus, blue, white, pink
Lychnis chalcedonica, scarlet
" Viscaria f. pl., rose .

Monarda (Bergamot), Cambridge, scarlet
Nepeta Mussini (Catmint), soft mauve . . . Front row.

Enothera (Evening Primrose) biennis gr., yellow . Back row. " pumila, yellow . Front row.
Oriental poppy-
Beauty of Livermore, deep crimson . . . Back row.
Oriental King, scarlet "
Pæony-
Beauté de Villecaute, light pink . . . Middle row. Is. each.
Candidissima, primrose and white
Duchesse d'Orléans, lilac and rose

Is. "
Fragrans, rose "

Is. "
Officinalis canescens plena, pink
Phlox, Avalanche, white 39
" Coquelicot, orangescarlet "
" Elizabeth Campbell, pink Front row.
" Pantheon, deep pink . Middle row.
" Le Mahdi, violet . Front row.
" G. A. Strohlein, crim-son-scarle

Middle row.
Polemonium Richardsonii, sky blue

Front row.
Potentilla, Miss Wilmot, rose "
Pulmonaria angustifolia, az. deep blue "
Pyrethrum, Jubilee, crimson " " Rev. W. G. C. Cuff, deep pink "
Rudbeckia, Golden Glow, yellow . . Back row.

Rudbeckia, speciosa, orange-
yellow . . . Front row.
Salvia virgata nemorosa, purple Back row. 9d. each.
Sedum spectabile, pink . . Front row.
Sidalcea candida, white . Back row.
Solidago (Golden Rod)
(Golden Wings) yellow " 9d. "
Spiræa Filipendula, white
" Aruncus palmata, pink . . Middle row.
Thalictrum aquilegifolium, mauve Front row.
Tradescantia alba, white "
Valerian, crimson Middle row.
Veronica amethystinum, dark

> blue . . . "
prostrata, bright blue Front row. spicata alba, white . Middle row.
Viola, Cheshire Cream . . Front row.
" Wm. Neil, pinkish mauve

| Maggie Mott, mauve | " | 2s. doz. |
| :---: | :---: | :---: |
| Biue Stone, light blue | " |  |
| Councillor Waters, redpurple | " |  |
|  |  | 16s. 5 d . |

This leaves a small margin out of the $£ 5$ note to pay for digging, trenching, and manure, seeds, stakes, and labels; and it may be borne in mind that where manure is not easily obtainable there are fertilizers sold, not only for potplants but in larger quantities for borders.

## CHAPTER V

## COLOUR

Broad effects-Masses of colour-Juxtaposition and contrasts of colour-The difficulty in choosing colours as described in catalogues-Efforts made to counterbalance this by the use of R.H.S. colour lists.

This is a difficult subject to approach, as very few see eye to eye with regard to it. The average gardener has no sense of colour, good grower though he may be, and will cheerfully plant out magenta stocks in a blue border carefully designed by his master, without seeing any discord, and is much aggrieved and very hurt when he has to remove them in full bloom.

In painting a picture, one places the colour one knows should be there rather than what one sees, and possibly in the arrangement of masses of colour in a border, an artist would arrange his flowers in exactly the right tone to give effect to the definite idea he has in mind. So that the border, designed as a


PHLOX AND HOLLYHOCK at Milton Court, Dorking.

FROM A DRAWING BY MARGARET WATERFIELD.
whole, would present a very different picture if broken up and the positions of the different plants altered.

Perhaps the following illustration will help to make my meaning clear.

Some years ago I had the privilege of going out sketching with Mr Solomon, R.A. The subject was a white goat in a hayfield. I painted my goat white, with nice grey shadows, and I painted hay-coloured hay. Solomon painted his goat, not white, but chiefly pale blue and green, and his hayfield was not painted with hay-coloured paint, but in all shades of violet and rose and mauvepink colours which I didn't see at all in the hay. When we had finished, his was a real live goat in a field of growing hay-mine was a flat sort of cardboard presentment, of something the shape of a goat, on a mud-coloured background! I am glad to say. I own the sketch of the real goat, and it has often helped me to look for the colour which ought to be there when I don't see it.

This is technically called the relation of constituent masses of colour to each other ; in other words, two colours, neither of them apparently the colour of what you want to reproduce, will, if used with the right know-
ledge, combine when placed next to each other to give the effect you are trying to arrive at. In the same way, the wrong colours used together will give a very different effect to what you desire. Suppose a very brilliant effect is needed in one portion of a border, and you plant some vivid blue flower, such as Anchusa Dropmore, and a bright crimson Oriental poppy together. From a distance, or with half-closed eyes nearer, the two will merge into purple. No longer have you high light in that spot, but a purple shadow. Or, if you were to plant a bright scarlet poppy, you would get even a muddier or blacker effect. Just as in a picture you can paint a jet-black horse, such as the Landseer in the National Gallery, without any black at all, and with only dark blue, and crimson lake, and white-so if you use these same colours together in a flower border they must of necessity lose their brilliance when the border is looked at as a whole from some distance away.

The very modern French landscape artist uses pure blue for his shadows in painting a sunny picture.

Lafarge, the great American colourist, whose influence on the art of this century will equal
that of Wagner on the music of the last, painted his large pictures, designed to cover walls of various halls of Justice, on a most unusual plan. When looked at from a distance, they gave an impression of colour never equalled; but when looked at close to, he would point out to you that, where he desired to get green, he painted lines (unevenly) of blue and yellow, or pure colours, giving an extraordinary vivid effect when seen at a distance. His own eyes, which projected in a very remarkable fashion, could get the desired effect when quite close to the painting. The right sense of colour is greatly a matter of education. It may be inborn, but it is generally achieved unconsciously, by the association, perhaps only in childhood, with good pictures or harmoniously dressed women.

Should the gardener, whom this is designed to help, not own a sense of colour, let him take a plan, carefully thought out by one who not only has this sense, but also knows how to express it, and let him plant his border from that. Then, as time goes on and his eye becomes educated to the right use of colour, he can embark on new schemes of his own invention. He will find that it is best to get his reds in different strengths of tone, shading
from cream, light yellow, bright yellow, orange, salmon, scarlet, maroon, and from light pink to rose colour and crimson, and his mauves in varying tones to purple. While blues are best used if in the pure vivid tones, either alone or with lemon yellow, the paler blue and white are effective together.

The happy accident often lends itself to the finest effect of all, as when a primrose-coloured seedling of the lupin comes up and flowers next to and at the same time as a "King of the Blues" delphinium; or when a hydrangea in that indescribable shade of blue found growing on ironstone soil, a blue both rich and cool, has a group of pink gladiolas growing next and partly through it.

A great effort is being made to "standardise" colours. At one time it was quite impossible to glean any true ideas of the colour of a plant from the description in a nurseryman's catalogue. Even now, however, too much is made of an attractive-sounding description of a colour without strict regard to veracity. For instance, Achillea Crimson Queen is described in a catalogue before me as a brilliant cherry colour, whereas in effect it is a rather muddy dark pink. To me the words cherry colour and rose colour convey the idea of a

To face page 80.


A Yucca.
clear colour without (if paint is used to define it exactly) any admixture of white-whereas "pink" is more opaque, or rose with some body colour mixed with it-cherry red being somewhat nearer red than rose. When, in old days, cherry-coloured ribbons were the fashion, surely they were nearer the colour of a ripe cherry of that date than the "thick" pink of an improved Yarrow. I cannot think of any herbaceous plant that exactly recalls cherry red. It is seen in carnations, in gladiolas, and in geraniums. Perhaps the ivy-leaved geranium Charles Turner will fit it definitely as a mind-picture. Rose colour is found in Godetia, and in mallow, or rather Lavatera, but to describe Aubrietia moerheimi as "pale rose colour" is absurd. It should be simply called pale pink, and is of a chalky quality of colour, just as forget-me-not (not the waterside variety) is also of a chalky quality of blue.

Catalogues do not so often go wrong in descriptions of yellow-at least they give us some idea of what they mean to convey. Exception has been taken to the lavish use in them of the word golden as a description, it being held that gold is red, like gravel or sand. It is so in its crude state, and I cannot think of any flower the exact colour of a sovereign.

But take the highly polished gold of gold plate, and can anything be brighter ? Anyone who has seen a Royal collection of gold plate, filling one side of a room from ceiling to sideboard, will know that golden and dazzling are synonymous, and that even "vivid" or "brilliant" yellow does not quite interpret " golden." Moreover, the expression has, by length of usage, come to mean this highest effect of any colour, the highest in the gamut, and no one would think of connecting it with the colour of a sovereign, when seeing it used as a description.

Where a catalogue really runs riot is when purples and mauves are described. At this moment I have a bloom of Iris stylosa in front of me, of the warmest, most vivid mauve, like a very well-grown Marie Louise violet, or a certain variety of Cattleya orchid. This iris is described by one of our best firms as a "lavender blue." Now, the lavender is grey, with a small, not very light purple flower, and the effect is quiet, not to say dull. The generally accepted tint of lavender, as applied to kid gloves, is a pale grey with perhaps a tinge of blue or mauve-at any rate the coolest, lightest of tints, far remote from the vivid flower facing me.

Iris Caprice, too, is called " lavender-shaded red," a very ugly description which does not in the least represent the rosy mauve of the flower. Lavender to me means a pale, cold tint, like that of Scabiosa caucasia, or sweet pea Lady Grisel Hamilton ; while mauve to me is a colour between freshly open wistaria and sweet pea Mrs Walter Wright.

Aster Top Sawyer is described as having "clear blue flowers," whereas it is a rosy mauve, of a chalky tint rather than clear.

In the same catalogue that called Aubrietia moerheimi soft rose, aster St Egwin is described in the same way; yet they are not the least alike in colour as grown here, St Egwin being a beautiful rose pink, many shades deeper than the Aubrietia.

Purple, violet, and blue are the colours most difficult to get attached accurately to their respective owners.

Aster Beauty of Colwell is called "deep violet purple." Now, if that means anything it would be the darkest and richest shade of purple known, and in any case is a redundant description, for violet and purple are surely the same? As a matter of fact, the aster in question is mauve, rather a clear or blue mauve.

One would much like to have purple clearly
defined. Royal purple is, of course, a wine or murrey colour ; but see the word purple clematis written, and a mind-picture is instantly formed of a purple the colour of Clematis Jackmanni.

If one takes violet as describing the violet Princess of Wales, or any of the single violets we see piled up in baskets in the streets, which are surely the origin of the description, how can one reconcile it with the extraordinary coloured tulips sent out as violets ?-magenta, maroon, red mauves, all classed as violet. There is no doubt this wants simplifying. There are red-purples, and there is a crimsonpurple violet, Admiral Avellan. There is a blue-violet, as instanced in California, the Nice violet.

There are lilacs of all shades and tones in real life, from the washy-blue Persian lilac to the full stately mauve of Cottage Lilac and the red purple of Charles X. But the generally accepted term lilac as applied to colour is a fresh, springlike, pinky tone of mauve. Another old colour one never hears of is puce ; one's great-grandmother wore it, and I imagine it to be a very grey mauve, or was it more of a dull, pinkish shade?

Possibly the colour chart of the R.H.S. will
help to decide these knotty points. For if we learn to know a certain flower as of a certain colour, we shall soon get out of the habit of using all and sundry terms to express one colour while meaning another. It is only a matter of association after all. To us a shade described as "American Beauty" means nothing. In America the smallest child knows it for a brilliant rose red. Simply because the American Beauty rose is the flower beloved of all Americans, and is seen the winter through in masses in every shop window and in every house, till the colour has become so associated with the name that the name is now standardised, as much as "primrose" colour is generally known here.

Always remember that the simpler the scheme of colour the more effective it is.

That clear blues should be kept together, and that grey or purple blues must not be mixed with them.

That too much white in a border looks spotty, and looks best in a breadth by itself.

That the foliage of such plants as funkias and day lilies shows up the vivid colourings of red flowers, and that grey can be used with much softening effect between two colours that might otherwise clash.

## CHAPTER VI

## THE MIXED BORDER

For a small garden-Importance of careful selection-Only the best varieties-The restraining of one's acquisitive-ness-Grouping and names of plants_List and plan.

For small gardens no better example of a successful mixed border can be found than a cottage garden. Whether it is that the space is so limited that each individual plant is more carefully tended than in a large garden, or whether it is merely that each plant is better seen, the fact remains, that nowhere does one see more beautiful effects and better-grown plants than in some of our country villages. The outdoor chrysanthemums in Scotland and in Staffordshire are a perfect sight, and put many of us owners of larger gardens to shame ; and so it is with many another plant. Here are to be found not so much the broad masses of studied colour, but a kaleidoscope of vivid detail and good cultivation. These gardens are never without bloom from spring to late

autumn. I know a garden, rather larger than the average cottage garden, where you walk quite a long way between neatly clipped box edgings before turning off to a tiny garden of square beds and brick-paved paths in front of the cottage. It belongs to a man who works on the railway line, and he and the wife spend all their spare time working in their garden. Nowhere does one see finer standard roses, great heads a yard through, with solid healthy blossoms without number. These are planted each side of the long path, in borders filled with herbaceous plants, and such annuals as stocks, asters, and balsams. Behind are well-laid-out kitchen-garden plots and fine old fruit trees, and you feel that it is the apple of someone's eye.

It is this quality of love for one's garden that makes it a success; without it no garden can be anything, however many the gardeners, and no matter how much money is spent with the nurseryman.

Dean Hole's story of the wife who cheerfully let her husband take the blanket to keep the frost off his pet plants is an illustration of the love and self-denial that ofttimes are the foundation of the beauty we admire in these cottage gardens; and yet you hear people
wonder that they cannot get their plants to look as well " as the cottage gardens on my estate."

No, for that same quality of self-sacrifice is needed that makes a man, however tired after a hard day's work under a hot sun, harvesting or haymaking, go out and tend his flowers, hoe up the caked earth round their roots, with hands tired and aching already, or carry water from a distant well for them before he sits down to rest. Surely that love for his flowers which all unknowingly prompts his care, must bear fruit in proportion to its lavish outpouring.

Another cottage garden, formerly a little gem of its kind, with friendly brick walks and borders to the doors, filled chock-a-block with sweet gay flowers, has fallen into the hands of a "small holder," who has made a neat lawn in front, planted geraniums, and destroyed all the borders. No doubt his ambition is satisfied, but no one now stops to look and admire as of old. All the charm has gone-it is incongruous. Just as one could never rightly place a cottage garden in front of a Georgian mansion, so one cannot fit lawns, landscape-garden effects, and long perspectives of herbaceous borders into one's scheme for a cottage, or a suburban home.

Let us suppose a garden of $\frac{1}{4}$ acre in an
oblong at the back of the house-about the most difficult and prosaic site that can be imagined, but one that is the most often met with. The garden measures 52 by 204 feet. Now, instead of a grass plot (fondly called the lawn) in the middle, gravel paths round, and a border beyond of flowers or evergreen shrubs, let us make a dividing line down the middle, and plant a hedge, choosing such shrubs to form it as will do best in the locality. If in


Plan $A$.
a warm place, have a hedge of Cupressus macrocarpa, or in a shady place with poor soil, Arbor vite or Thuja. Perhaps one of the nicest hedges is the old sweetbrier, but it must be planted in well-enriched soil (and it prefers a cool, stiff one), be well done to encourage growth, and kept clipped after flowering, when it makes a dense, impenetrable hedge. The scent of it is delicious, but it does not make quite such a good background for your flowers as an evergreen one. If your
soil is poor and you want a quickly growing hedge plant, use the Portugal laurel ; and even the common laurel, robber though he is, or a privet of the small-leaved kind, or lime or beech.

On one side of the hedge shall be planted flowering and fruiting trees, and an almond, Prunus pissardi, with its red leaves and early white blossom, double cherries, Pyrus malus, apples, pears, quinces, and plums, with grass under them. This will make a shady lawn, which may have early daffodils, crocus, and snowdrops planted in the grass. If the trees are carefully arranged not in exactly straight lines, a pretty vista may be attained. On the other side of the hedge shall be the herbaceous borders, each II feet wide, with a paved path in the centre 3 feet wide.

Now we have the hedge as a background to one border, and the wall or fence to the other. If the wall has a good exposure and sun, plant roses, honeysuckle, jasmine, ceanothus, escallonia (with evergreen leaves), and clematis. If facing north, then small-leaved privet (nailed in), Cratagus pyracantha, euonymus, and even rosemary may be trained on it. The borders may be slightly raised, a foundation of clinker, old brick rubble or stones, being used to

To face page 90.


Raised Border with Rock Plants at Edge,
in Mrs. Greer's Garden at Curragh Grange.
raise it some 9 inches in front. Plenty of good soil must be added to raise it up well ; and if the soil is clay, all the top soil should be taken off first, and the borders drained by having a foundation of clinker or rubble as aforementioned (see Chapter II.) at the bottom, and then the soil put back on the top of it, and well enriched. Thirty-five or 40 feet away should be a hedge, running across the borders, and allowed to meet in an arch at the top when it grows tall enough. This need not run across the orchard strip, which may be carried further into the plot beyond.

Now we shall have two borders, 35 or 40 feet long by i I feet wide, with a stone or rockwork edge on which to grow all pinks, pansies, arabis, and some of the annuals, which will fall over in sheets of flowers to the paved path below, which can be kept in better order than a gravel or grass path, and which can have small plants among the stones or bricks, or musk, from seed sown in the chinks.

In planting the borders, care must be taken not to crowd out the hedge, if it is of young plants, and to keep a watchful eye on strong growers such as sidalcea and Michaelmas daisies, that they do not grow in and smother the hedge.

It is really important to grow only the best form of a family of plants where space is limited, and not to admit any inferior variety, even when offered to one for nothing. It takes some strength of mind to refuse a plant one has not got, but it must be done if you have a better variety yourself, as it is no use having


Two borders for small gardens, $25 \times 10$.
too many kinds in a small garden. Better far to increase your own plant and so get a good mass of colour. For instance, asters (Michaelmas daisies) have been so multiplied of late years that there are many which do not differ greatly ; and it is necessary to be quite firm on this point, and only grow three or four of the best. In a border kept entirely for
these starworts, any number may be included, but in the herbaceous border a judicious choice must be made.

A very good variety was Harpur Crewe, but since Climax has been introduced, with a flower twice its size and of better growth, there is now no reason to grow the former. Nor need anyone owning Lil Fardell grow Mrs Rayner or Elsie Perry. It is important to remember that there is a vast difference between the man who collects and the man who accumulates. Always try for the best of its kind, and having obtained it, burn or pass on the inferior variety it has replaced. Man is naturally acquisitive, but the small gardener (always, be it understood, in the same sense as the "small holder ") must restrain this instinct if he wishes to have a beautiful border, and not a muddled, crowded glory-hole for other people's rubbish.

In planting our borders there need not be the same striving after broad effects that is obligatory with borders of great length and width. Where it is under one's hand, so to speak, it is possible to mix the colours in a way that would only be a failure on a large scale. Certain flowers must be kept away from each other in planting, however. It would not do to
place your orange-red Oriental poppy next to your pink pæony, for they flower at the same time, nor near your crimson pyrethrum ; but it goes well with lupins, and even with the lilac and white single rocket, so much more beautiful in its tall branching growth than the dumpy double rocket.

Linum dalmatica, of sulphur-yellow flowers and blue-grey smooth foliage, is happily placed near the blue anchusas ; delphiniums and tree lupins, white and yellow, fraternise well. A clump of orange Lilium croceum never looks better than at the foot of a bold group of dark blue larkspur ; or, if lilies will not grow in your soil, a plant or two of orange-scarlet lychnis. It is astonishing to find that sometimes an accidental encounter of two colours, sounding abominable on paper, will turn out most attractive when seen growing together. A plant of the rosy mauve Salvia Sclarea, some 5 feet high, seeded itself and came up and flowered next to this scarlet lychnis, with the happiest effect ; the mauve seemed to take on all the silvery-grey tones when next the scarlet, and showed it up well.

It seems easier to harmonise the late summer flowers than the earlier. The greys and mauves of Michaelmas daisies, and the many yellows
of Golden Rod, helianthus, and rudbeckia are easy to manage. A lovely combination (accidental) was arrived at by Helenium superbus, with its clear, lemon-coloured flowers set off by the low-growing vivid blue of Aster Amellus at its feet. Bring the aster into the house and it looks a violet or blue mauve, but against the helenium it had a brilliant blue effect.

The phloxes in pink, cerise, and purple, and the fiery Coquelicot, Etna, and Strohlein need to be kept rather to themselves in a group, and if possible on the shady side. They can have as neighbours Artemisia lactiflora, creamcoloured, feathery, and tall Japanese anemones in white and pink, Gypsophila paniculata or gauze flower, and echinops with greyish foliage, lined with white and soft blue, thistle-like heads.

The summer chrysanthemums need all the sun they can get, and should be planted in the first row, as they hide any vacant space left by some earlier-flowering plant such as campanula or foxglove.

Oriental poppies must always be planted behind something that will flower later, such as bergamot, aster, lily, lychnis, or achillea. It is always best to plant an early-flowering plant behind a later one, and not in front of it.

Then the yellowing foliage of the one is hidden behind the oncoming freshness of the other. Phlox should always be planted towards the front of the border, as they usefully hide delphiniums or anchusas when over. Pæonies need to have something, either in the nature of an annual like mallow, sown with them, or gypsophila, which will branch out and grow right over any flowers past their best.

Hollyhocks have been omitted from the list on account of the extreme difficulty found in growing them free from the disease which attacks them, and which renders them so unsightly. Curiously enough, they seem to be perfectly healthy when growing in some roadway garden, exposed to all the white dust rising in clouds from the highway. Possibly the dust has some purifying effect on the disease, especially if the roads are limestone. Should it be found, however, that they do succeed with anyone, they are the greatest addition to a border or small garden, something in the rigid lines of their spires of bloom, and the tender grey-green woolly texture of stalks and buds being unlike any other flower (unless the mullein be counted as a poor relation), and which lends a touch of distinction wherever seen, whether it be against the whitewashed wall of an

To face page 96.


Hollyhocks from a Cottage Garden.
old thatched cottage, or the velvety background of a closely clipped hedge in some well-kept garden.

Bulbs and lilies have not been allowed for either, as they are merely adjuncts to the herbaceous border, and if funds are limited, they must be added as funds allow ; only do not be misled into buying them too late in the year, when surplus stocks are advertised cheaply. Lilies want a long time to grow their roots, and need to be planted in good time, Madonna lilies in August even. Much depends on the time of the year that certain plants are moved, and the failure of pæonies and iris is often due to their being moved too late to recover in time. Pæonies should be moved in August or September, and iris immediately after flowering, while lilies of the valley never move so well as in February, when just starting into growth. This applies to anchusa and phlox also.

Some of the front-row plants will have to be clipped after flowering; white pinks, for instance, and arabis and alyssum need the shears. It seems to keep them vigorous, as well as neat. Pansies and violas need cutting hard back after their first flowering ; they will then flower a second time, and all the new
shoots can be dibbled in and fresh plants secured. In contradistinction to this, lilies should never have the stalk pulled out. It should be cut off half-way down and left, otherwise the rain may find its way into the heart of the bulb and destroy it. This applies also to lemon verbena when planted out.

A very simple arrangement for a small square garden is to divide it into four, with paths across. The four plots are of grass, with 4 or 5 feet borders round each of them, and the outer paths are all bordered with old apple trees, trained on espaliers long ago, but now standing hoary and gnarled and stiff with age, and needing no support. These borders with the apple trees are gay with every variety of perennial and biennial plant, foxgloves, Canterbury bells, coreopsis, gaillardias, lupins, poppies, and snapdragons, grown in mixture and without regard to colour, while the remaining borders are each devoted to the cultivation of one kind of flower. In one grow campanulas of all sorts, white, mauve, and purple, short and tall. In another delphiniums in every shade of blue, including the yellow species and the new white, also the crimson species.

In a shady border, matching the campanula border, which was also in shade, are all the
phloxes, the flaring scarlet G. A. Strohlein and dainty pink Selma and Elizabeth Campbell

Plan $B$.
and purple Mahdi. The sunny border holds a fine collection of iris; German iris in all shades, English and Spanish. Yet another
is filled with pæonies, both single and double, and this one faces south-west. Michaelmas daisies in about fifteen varieties of pink, white, crimson, mauve, and purple fill another, while the last is all in Japanese anemones, in white varieties only. Most of these borders are filled with bulbs of all kinds that die down in good time, and whose withered foliage is hidden by the growing plants as they spring up.


Another and less expensive small garden was laid out as follows, and has been so laid out for the last three hundred years. It was a sunny, oblong garden with an immense holly hedge on each side, and slightly sloping to the south. Along the holly hedges, which were on banks sloping to the garden, were wide borders of herbaceous plants. The centre of the oblong was gravelled, and was a maze of small beds in different simple shapes, each bordered with clipped box standing a foot
high. In these small beds grew snapdragons and pansies, brown, yellow, and purple ; forget-me-nots, pinks and carnations, the old crimson clove, and the white George Macquay, and sweet-scented geranium and many good annuals. The curious spicy fragrance of that garden comes to me now : the warm sun on the box, the Eau de Cologne-like bergamot, and the freshness of the lavender given out in waves of scent as the heavy bees brushed against the flowers.

Both the above gardens could well be taken as the foundation for a small garden of a quarter acre. But it must be borne in mind that, where there is smoke, few perennials are seen at their best. Certain plants, such as iris of all sorts, seem to like smoke, and never bloom more freely than in a town garden. Carnations also, and all the " pink" tribe (and there are many worth growing). Delphiniums, day lilies, funkias, and many more are quite happy near a town.

An object-lesson in growing plants in a London garden is afforded at Holland House, where the finest delphiniums may be seen; and I wonder sometimes whether it is not the lack of cultivation and of right manures which stunt their growth in towns. Certainly
lime might be more freely used to counteract some of the injurious qualities deposited by the smoke. And, naturally, the difficulty in getting well-decomposed manure, leaf-soil, grit, and wood-ash, etc., is very great, and they are done without, and the plants starved in consequence. Artificial manures and fertilizers are used with good results now that the chemical needs of plants are being more studied, but need to be judiciously applied, and not placed in contact with growing plants but dug into the ground before it is planted.

To face page 102.


Lady Evelyn Cottrell's Garden - Garnons.


Lady Evelyn Cottrele's Garden - Garnons.

## CHAPTER VII

THE MIXED BORDER (continued)
For large gardens-Arrangement of plants-Tending to repetition-Danger of allowing the coarser plants to overgrow the choice specimens-Grouping, and lists of plants for foreground, middle distance, and background.

The arrangement of the large herbaceous border, where you get into your two or three hundred feet lengths at once, is very much more difficult, even in proportion, than the arrangement of a small one.

It is so difficult not to get it spotty on the one hand and too regular on the other ; so difficult to have the right effect, when breaking into a certain level of planting with a bolder clump of some taller plant, so that it may run from its proper place in the background right through to the foreground without appearing studied. To make Nature subservient to art, and yet to completely
obliterate the fact that you have done so, is no easy matter.

The rainbow border, beautiful as the descriptions of it are, with their gradations of colour, presents such difficulties when it comes to practical gardening, that you rarely can find any good gardener who will undertake it. Personally I have not happened to meet with a successful rainbow border, though doubtless in the hands of one who is artist and gardener as well, the subtle gradations of colour, and the accurate knowledge of the times of flowering and heights of the various plants can be dealt with successfully.

My own attempt at it failed signally, possibly because it needed years of alteration and constant removal of plants to obtain anything like perfection.

There seems to be a certain feeling for strong colour in the centres of these long borders, led up to through paler colours at the ends. A plan illustrating this has been kindly lent me by Mr Crisp, and will be found at the end of the book, for a border 300 feet long and 12 feet wide, and where an average of three and a half plants is allowed to each square yard.

Where a pleasing contrast like a clump of
delphiniums in royal blue and a feathery bush of sulphur-coloured tree lupin has been a proved success, do not be tempted into repeating that at intervals along your border. Rather make a larger grouping of it, and if you feel you can use the same combination again, place this time some totally different plants around it. For instance, if before, a handsome tuft of green- and white-leaved iris were its foreground, with the grey grass of white pinks in front of that, have for the second clump of delphinium and lupin some white foxgloves as neighbours, and a foreground of the glaucous blue-green of Funkia Sieboldii.

An example of bushes of La France roses in a Welsh garden, superb as their growth certainly was, is always before me as a warning against repetition. They recurred at regular intervals, these intervals being filled in haphazard with red and yellow flowers. It is always better, if you have a number of plants of one kind, to mass them in one or two large irregular plantings, running rather lengthwise in the border than in a round clump; and in a very long border you will find it far more effective, because simpler (and herein lies the truth of the whole matter), than to
have these same plants spotted generally along the whole length. You don't want to walk along the border meeting perpetually the same face, till at last you avert your eyes when you come to the same plant again and say, "Oh, Daisy, I really can't go on bowing to you any more!"

Another danger is that of allowing certain rampant-growing plants to take possession of the borders. Achillea ptarmica is a precious plant of useful height, and one that remains fresh and blooming for months; but-and it is a very big but-it will take possession of the entire border if allowed to, and must be ruthlessly thinned out each year, and must never be planted near any new plant, or one of not so pushing a habit that is to be established. Pyrethrum uliginosum is another robber, and will extend on all sides until, after three or four years, it will take the united efforts of three men to move a clump ; but so beautiful is it in October, when but little else is left in flower, that it cannot be altogether denied a place. The yellow scabious growing 12 to 15 feet high, though an important plant to grow in one of these large borders, spreads and robs the ground unmercifully in the process. So also will the white willow-herb, and for
this reason should be planted on the poorest and driest spot to be found, for it is too good a thing to be eliminated. It is not only the tall plants that need to be watched in this respect, London Pride will overflow its borders without scruple, and so will Nepeta Mussini.

Chrysanthemum maximum, sidalcea, asters, some of the campanulas, grandis especially, galega, saponaria (a dreadful weed in rich soil), helianthus, Coronilla rosea, all need to be guarded against ; the last named I would never admit at all.

Do not try to fill your borders so full of blossoms that you cannot distinguish one from the other. It is not at all a matter for congratulation when you say that not a square inch can be found in your border, or above it, without a flower. Nor fall into the opposite error of seeing each plant and stake rising from neat brown earth. If you have wisely planted, with a view to future increase, carpet your ground with annuals, saxifrage or funkia, that can be moved in time to make room for the new growth of the next year of the perennial plant, and so avoid any empty spaces.

In thinking out the arrangement of the plants, it is well to classify mentally the up-
right and literally spiral growth of some in contrast to the branching or massing forms of others. Delphiniums are of the former class, and it is partly owing to their habit of growth that they rank as the most effective plant in the border. The lupin is of the same habit, but with this distinction, that its spikes are all more or less of the same height, whereas the larkspur-or delphinium-sends tall spikes upwards, rarely, if ever, of the same height; and it is this variation in height that lets the air or atmosphere into our picture, and enables us to mass some compactly growing plant such as Chrysanthemum maximum, or Anthemis, next it without any effect of heaviness in the mixture.

Hollyhocks and eremuri have this spiral quality, and tritomas (red-hot poker) also ; so has the yucca, with its creamy bells in rather denser spikes, raising itself with great distinction from among its dark-pointed leaves, some of which stand up like spears.

Among the front-row plants, it is only necessary to look at the way the sword-like leaves of the iris stand out, and up, against the more solid mass of colour presented by a group of pink pæony or of scarlet poppy, to value the form of it at its true worth as a component part of the picture. One or two of

To face page 108.


Lupins.
the veronicas, lavender, day-lilies, or a sheaf of white Madonna lilies will give this upright note that is requisite, so will snapdragons, foxgloves, and later on Hyacinth candicans. A glance at the accompanying picture will illustrate my meaning.

In giving lists of plants for foregrounds, or middle or back rows, it must be remembered that some break must always be made. Here and there some middle-row group such as achillea Crimson Queen should run back among the taller background plants of Galega officinalis (grey-mauve), or the back-row plant Artemisia lactiflora (cream-coloured) come boldly forward among Veronica spicata (blue), while geum Mrs Bradshaw (orange-scarlet) could come well into the foreground of Santolina incana, the grey-dwarf variety.

Clematis recta, cream, and anchusa opal, pale blue, could rise from a stretch of Onothera fruticosa, yellow and low-growing, doing away with a middle-distance plant altogether. A patch of Veronica amethystina would find its spikes of quiet blue well shown up by clouds of rosy larkspur, an annual ; and Salvia nemorosa virgata will make a daring purple patch of medium height against the lurid scarlet and orange of some big groups of tritoma. In
fact, the combinations that may be thought out are endless, but always bear in mind that two spiral plants such as eremurus and tritoma, two mass plants such as Shasta daisy and gaillardia, should never be placed together, and will look better if each spiral is placed with a mass plant instead of the two spirals together. Eremurus Bungei, yellow, will look better with the gaillardia to show off its form by spreading splashes of colour behind and around it, than if placed near the torch lily (tritoma), also of spiral form, which should be placed near the Shasta daisy.

Among plants suitable for foregrounds, the following lists may be helpful, the names in italics being those suitable for a stone edging or for carpeting only, as they are very small.

Auriculas; Ajuga deep blue; Alyssum yellow; Anemone, St Brigid and coronaria; Aquilegia glandulosa blue and white ; Arabis white; Aubrietia mauve; Asperula tinctoria white; Aster alpinus blue, rose and white; Aster altaicus yellow ; Bellis perennis white and red; Campanula barbata, pusilla blue and white, carpatica blue and white, S. F. Wilson, and glomerata; Dianthus in variety (pinks); Funkia in variety, Geranium Lancastrium pink, and G.pratense florepleno mauve; Convolvulus cneorum pink; Cerastium grey foliage and white flowers (useful carpeting plant) ; Delphinium zabil sulphur-coloured and 6 inches high, D. nudicaule red; Epimediums grown for their foliage ; Erigeron mucronatus like a small pink and white daisy, very feathery, Erigeron grandi-

flora purple ; Funkia; Gentian acaulis blue, and Gentian verna; Geum montanum and sibericum orange and salmon; Heuchera sanguinea scarlet; Iberis, candytuft, white in variety; Iris graminea, pumila, reticulata, and other varieties; Jasione blue, lavender (a dwarf variety) ; Linaria compacta; Lithospermum prostratum blue ; Lupinus nootkatensis blue; Lychnis rose, and lychnis floreplena pink, viscaria red, alba white; Meconopsis cambrica yellow, and its double form in orange and yellow ; Mimulus yellow and red; Myosotis blue, white, and pink; OEnothera eximea, speciosa, and taraxacifolia white, rosea pink, fruticosa yellow ; Omphalodes verna blue, Omphalodes lucillice and nitida; Onosma tauricum yellow; Papaver pilosum terra-cotta; Papaver nudicaule orange, white, and yellow, ruprifola salmon; Pentstemon caerulae azure blue, and glaber purple; Plumbago larpente cobalt blue; Polemonium pulcherrimum cceruleum blue, reptans blue; Polygonum alpinum white, vaccinifolium pink; Potentilla nitida pink; Primulas in variety; Pulmonaria blue, white, and red; Ranunculus in variety; Rudbeckia Newmanii yellow ; Salvia argentea grey ; Santolina incana grey foliage; Sedum spectabile; Saponaria ocymoides; Silene in variety pink and white; Solidago (golden rod) virgaurea; Spiræa palmata alba white; Stachys grey foliage; Statice incana pink and white; Thalictrum adiantifolium white, minus purple; Tiarella cordifolia white; Trollius in variety orange; Valerian red and white; Veronica repens blue (carpeting plant), Veronica spicata blue and white, and candida blue; Violas in all colours; Zauschneria scarlet.

Where no stone edging is to be had, it will be best not to use the very low-growing edging plants, except here and there, as a carpet to lilies or narcissus, or the effect will be too stiff and formal.

In the picture opposite this page a good use is made of larger plants for a foreground such as Iris germanica with its fine foliage on one side, while on the other is Megasea cordifolia, the giant-leaved saxifrage, more iris, and double Narcissus poeticus with gardenia-like flowers.

This border has a delightful background of apple trees and a grass walk, and is shown in another picture later on in the year with tall white daisies in flower. Other borders in the same garden are edged with box clipped square and solid, and behind this of course no very low-growing plants would succeed at all.

Here we find rockets in quantity, purple, mauve, and white, day lilies, pæonies and phloxes, bergamot, lactuca with tall heads of grey-blue, and the dull-red eupatorium,-all seeming perfectly happy under the partial shade of gnarled grey apple trees. These shady walks extend through several gardens, and yet are always full of some interesting plant in flower. Here in the spring and summer are thickets of the lovely native anchusa, so little known and of such a lovely quality of blue, and numbers of aquilegias in all shades, with the quieter colourings of purple, blue, and white predominating. There
is something singularly restful about a garden of this description. The cool shadows and high lights through the trees, and the misty pool, with waving fronds of fern, seen through an old wrought-iron gate in the distance, have much charm.

One may take as a striking contrast the borders in a Scotch garden. Here in clear brilliant air, and with every inducement to flower profusely, is seen a broad walk of turf running up a steep slope backed with yew hedges cut into rounded arches, through which one peeps into other parts of the garden. And although there is nothing glaring, it is all a perfect riot of colour to which no photograph does any justice, partly owing to the fact that all reds and orange and some yellows are black in photography. No gardens are so brilliant anywhere as the Scotch gardens, probably because all the early summer flowers come out at the same time as the later ones, owing to climatic causes. The annuals are so intense and beautiful-viscarias in azure blue, crimson, and white ; eschscholzia in orange and rose; brachycome mauve, gilia and alonsoas scarlet, all seeming more vivid than further south.

Middle-distance plants should be anything
between 2 and 4 feet in height, and all above that belong to the back row or wild garden. In a small border one may use a much shorter plant for the background than in a larger border. In fact, a very tall plant would look out of proportion. Some of the best for the middle row are among the following :-

Acanthus (back row for a small border), purplish-mauve ; Achillea Ptarmica, white; Agrostemma, rose; Anchusa Dropmore and Opal (back row in small garden), blue; Anemone japonica, white, pink; Antirrhinum (tall), all colours; Aquilegia hybrids, red, yellow ; Asters, amellus and acris, blue-purple; Campanulas, lactiflora, latiloba, and persicifolia (back row of small borders), mauve, white ; Centaurea montana, blue, white; Chelone Lyonii, pink; earlyflowering Chrysanthemums in taller sorts, all colours; Coreopsis grandiflora, yellow ; Delphiniums, Persimmon, blue; Dictamnus, red, white; Digitalis, white; Doronicum, yellow ; Echinops, blue and grey ; Erigeron speciosa, mauve; Eryngium oliverianum, blue, silver-grey ; Funkia Sieboldii, mauve ; Gaillardias, yellow, red; Galega Hartlandi, mauve ; Gaura, white, pink ; Geranium pratense, purpleblue; Geums, red, orange; Gypsophila pan., white ; Heliopsis Zinniæfolia, yellow; Hemerocallis, yellow and orange ; Hesperis, white, mauve; Heuchera (tall variety), red, pink; Iris (tall varieties), all colours; Kniphofia (Tritoma) corallina, Lemon Queen, red, yellow; Lavender, tall, purple ; Lychnis, scarlet ; Monarda, crimson ; Pæonies, all colours; OEnothera fruticosa ; Oriental Poppies, orange, scarlet, crimson, pink ; Phlox, Mrs Oliver, Mahdi, Tapis Blanc, Aurora, pink, purple, white ; Potentilla, red, yellow, pink; Pyrethrum, crimson, pink, white; Rudbeckia Newmanii, orange-yellow ; Salvia virgata nemorosa, purple;

To face page 114.


Lupinus Roseus at Wisley.


A Scotch Garden - Glenogle, N.B.

Salvia Tenori, blue; Scabiosa caucasica, mauve; Sedum spectabile, pink ; Solidago Shortii, yellow ; Spiræa palmata, red, white; Thalictrum, white, mauve; Valerian, red, white ; Veronica amethystinum and spicata, blue, white.

A list of plants for the back row of the border may include the following :-

Aconitum, blue ; Anchusas, Dropmore and Opal, blue ; Artemisia lactiflora, cream; Asters in variety, including Climax ; Bocconia, cream ; Boltonia, mauve ; Campanula lactiflora, mauve; Centaurea macrocephala, pale yellow ; Cimicifuga racemosa, cream; Clematis recta, cream; Delphiniums in variety, blue; Epilobium albus, white; Eryngium giganteum (Ivory Thistle); Galega, officinalis and alba, mauve, white; Heleniums, grandicephalum, Hoopesii, yellow ; Helianthus, H. G. Moon, Miss Mellish, Wolley Dod, yellow ; Kniphofia (Tritoma) aloides, nobilis, Tuckii, orange, scarlet, yellow ; Lupinus arboreus, yellow; Lactuca, blue-grey; Onothera biennis grandiflora, pale yellow; Phlox, Etna, cerise, and some others; Phlomis, yellow ; Sidalcea, white, pink; Solidago, Golden Wings, yellow ; Spiræas, aruncus, filipendula, cream ; Thalictrum glaucum, aquilegifolium, sulphur; Verbascum, yellow ; Scabious lutea and lutea gigantea, sulphur.

## CHAPTER VIII

## ANNUALS AND BULBS

Use of other than strictly herbaceous plants-The impossibilities of keeping up an unfailing supply without these -Argument as to whether bulbs should be includedDirections for planting same-Names of bulbs that can be left in border-Annuals-Cultural directions and colours-LList of same.

> Definition of Herbaceous (Webster). - From
> "Herb: An annual, biennial, and perennial plant in which the stem does not become woody but dies down to the ground after flowering." Or, in other words, a plant which dies down in winter.

If herbaceous plants in the generally accepted sense of the word only are to be used in the border, many beautiful flowers would be denied to us. Lavender, for instance, spiræas, tritonias, white pinks and pansies, iris, and many others, which we can ill afford to omit as prolonging our season of colour, and also for their own beauty. Neither could such useful biennials as foxgloves, evening primroses, snapdragons, Canterbury bells, or Salvia Sclarea have a place, nor sweet-williams and all such
old friends. But if we accept the definition given by Webster of herb, and of herbaceous as pertaining to herb, then we may admit unquestioned annual, biennial, and perennial plants to a border. So let us boldly decide to include the best of everything in our border, both annuals and biennials, lilies and bulbs. It is impossible to contemplate a border lacking the fragrance of mignonette and stocks; and where should we find anything with which to replace the gaiety and brightness and general disposition of the nasturtium or marigold, blooming the summer through, or the sterling quality of Salvia Horminum, a mass of purple from June till frost?

What would the garden be like at evening minus the pale beauty and fragrance of Nicotiana, and the night-scented stock Matthiola, all but invisible in day-time, but vividly present to the senses as night falls? So ${ }^{\text {b }}$ let us leave here and there, when planting our border, irregular spaces where annuals may be sown, either to supplement and strengthen some pet scheme of colour, or to take the place of a perennial whose glory has departed. Think of the back row of a border where tall delphiniums are over by the end of July, and how instantly their place is taken and filled by
clumps of white and orange sweet-peas until the heleniums and Pyrethrum uliginosum in their turn are ready, or of the groups of big sunflowers, which would be deeply mourned by some should it be decided to do without our friends the annuals.

Bulbs, it has been held, are quite permissible in a herbaceous border, and they certainly fulfil the requirement of dying down in the winter. Some of them, alas! do not always come up again, are either eaten by mice, or are rotted with the damp, or they break up into bulblets and off-shoots which, through not being taken up and transplanted at the right time, eventually die out-starved out, in fact. The early-bedding tulips and hyacinths come into this class, and are not satisfactory to use. But take the Gesner tulip or Bouton d'Or (golden crown) : they will flourish for years in the same place. The newer cottage and Darwin tulips are, however, better taken up each spring and replanted, although they will occasionally flourish without attention, notably some of the very dark varieties.

Daffodils or Narcissi may be left from year to year, and come up smiling; not only the early-flowering ones, but also pheasant-eye and the double narcissus, which make hand-
some clumps. Their foliage can easily be tied up out of the way or pegged down to ripen. Where the border is planted for summer and autumn it is best to rely on bulbs almost entirely for colour earlier in the year, as the camassia and double narcissus, the latest of them, will merge pleasantly into the pure flowering Oriental poppies and lupins.

Snowdrop and crocus come up in unexpected places all over the border here. The former look their best when springing through a carpet of pinky-red Mediterranean heather, being in flower at the same time, and are so treated in large beds at Windsor Castle. Iris reticulata, dark violet and sweet-scented, and Iris stylosa, with bright green foliage and lovely mauve blossoms, are the next to flower. After them in gay succession come double daffodils, chionodoxas and scillas, both pale blue, and dog's-tooth violet; then through the whole gamut of Narcissi, beginning with Lent lilies and ending with the double-flowered kind ; grape hyacinths or muscari, of which there are several kinds, white, Cambridge blue, Heavenly Blue, and the old dark blue (a bad robber this last, and not advised), and plumosus, the mauve-plumed variety, a foot high. Then we get the purple-blue ixiolirions, which with
camassias are much neglected and deserve to be widely planted. The slender spikes of camassia are from 3 to 4 feet high, studded throughout their length with starlike flowers I to 2 inches across, in pale blue, white, red, and intense blue colourings, and resemble eremuri though in miniature. They come from British Columbia, where vast plains and fields are spangled with them rising from the grass in May and June. They do not object to a damp place, which is always a comfort in this climate. Then come a tribe of anemones. The early blanda, sylvestris, and Robinson are not included, as they do so much better in the grass; but St Brigid, coronaria, and fulgens, the scarlet windflower from the Eastern Empire, are very showy in spring, and like a rich soil with some old mortar-rubble added. Ranunculus, Turban and Persian, are good at the end of May ; and then come the lilies, wanting a cool soil certainly, but otherwise most accommodating in a border, a regular procession, from gaudy orange croceum, scarlet martagon, and white candidum or Madonna, to speciosum, white, red, and pink, giant auratum, and flaunting tiger lilies. These do well if undisturbed from year to year. Auratum, planted on gravel subsoil, and backed

by a yew hedge, have taken ten years to die out. For the first four years they were a fine show, but since then have dwindled gradually to one poor specimen. Speciosum planted the same time is still flourishing, but many other kinds of lily planted on the same soil have not survived the first winter, and their names are no longer numbered here.

Nothing seems to completely stamp out the disease affecting Madonna lilies, though replanting them in good soil, to which some lime has been added, answers for a time, especially if the bulbs have been shaken up in a sack containing flowers of sulphur, before planting, so that the sulphur gets beneath the scales. Gladioli add greatly to the brightness of the border, and cannot be omitted, even though they last in flower so short a time and are not very tidy at their latter end. If the soil is at all damp in winter, they must be carefully taken up and stored after flowering, and in such soil should not be planted earlier than April.

Some of the small, early-flowering gladiolus may be seen flourishing in cottage gardens in the south of England and presumably stay out all winter, and the new varieties are lovely. The big scarlet brenchleynsis is very useful
for a patch of colour and can be bought very cheaply, while the new dark-blue and violet shades are very beautiful and are now less expensive. They can be had in ranges of such colours as royal purple, blue, and heliotrope shades, and yellows, and many have been raised in Canada. Hyacinth candicans is a great standby for late borders, and, planted in groups of a dozen, their tall green stems with pendent white bells (as many as forty on a stem) and handsome foliage are most effective. They are quite hardy, and quite inexpensive. Eremuri, alas! are quite the reverse, and are very tender in most places; unique in form and height, they give a touch of distinction to any border, and are in lovely colourings-pink, mauve, white, and sulphur yellow, their tall spires thickly set for 4 or 5 feet with myriads of tiny flowers. Eremurus himalaicus, white, and Bungei, pale pink, grow nearly io feet high. E. Lemon Queen is a new variety of later flowering period, and E. Tubergeni, pale yellow, is a new cross between E. Bungei and E. himalaicus.

A lovely collection given me by M. Maurice de Vilmorin succumbed in two years to the damp, in spite of ashes to their roots and all precautions. Mr Robinson tells me that if


Eremurus in the Garden of the Hon. Mrs. Ernest Guinness.
grown on a raised border with good drainage, they will stand our climate perfectly, and that the fleshy roots will not rot away under these conditions. Montbretias are quite hardy, and of great use for cutting as well as colour, their red and yellow colouring and simple rush-like leaves being most attractive. The many new and improved sorts, Prometheus, Geo. Davison, Hereward, and Star of the East have flowers 3 to 5 inches across and are proportionately expensive to buy at present.

To see them at their best the corms should be taken up and replanted separately, yearly, at any rate every two years; if this is not done, they grow into a thick mat. Grown through white pinks, or purple pansies, they look well. The autumn crocus and the colchicum should both be in the border, and flower about the time most things are over. The double colchicum, both white and mauve, is a lovely thing, and so is speciosum, and giganteum, with great rosy cups that shine out in late summer ; but the leaves, which come up early, and are very large and green, are an unconscionable time a-dying, and very disagreeable and yellow while about it. For this reason the crocus is better than the colchicum, and sativus (purple), the common saffron, and
the October crocus (bright blue), are good and plentiful. Many other varieties are to be had in white, lilac, and yellow. Some of the crinums are hardy even on clay, capense making a handsome border plant with good grey-green foliage and tall umbels of pinkywhite flowers. Powellii, rose colour, and its white form do well on warm, dry soil, or at the foot of a wall, but are apt to be cut off by May frosts. It is curious to note that if allowed to go to seed, what seem to be seeds are really little bulbs, which do not ripen as seeds should, but fall green on the ground and promptly burrow underneath; they have a little tiny tail, which may be a root, or it may be to assist them in burrowing, just as a cyclamen is helped. Quite a number were collected and sown, but have not flowered yet, though it must be seven years since.

Dahlias, though not hardy, are included in many borders, not only for the sake of their late blooming, but because certain colours can be obtained from them which are given by no late-flowering tall perennial. Now that the asters are so good, dahlias need not be chosen for pink or mauve ; while yellow flowers are plentiful ; but for crimson, scarlet, orange, cerise, and maroon we are obliged to go to
the dahlia. They are not hardy, though one variety has proved so here in Berkshire. Possibly the hot-bed system of cultivation pursued for the last thirty or forty years has much to do with their tenderness, for at different ends of the gardens, one shady and moist, the other sunny and dry, two old plants of a double white dahlia have come up year after year, certainly for the last twelve years, with no attention of any kind.

The old type has been quite ousted, first by the cactus dahlia, and now, for decorative effect, by the new large-petalled variety showing a yellow centre and called pæony-flowered. There is a white one that much resembles a water lily, called Queen Wilhelmina, Glory of Baarn, soft pink; Queen Emma, salmon and lilac; and Landseer, crimson, which are good, and are 4 feet high.

In choosing dahlias for garden decoration it is well to pick out only those with stiff stalks, that hold up their heads well. For this reason it is not possible to choose them at a show, where all are alike displayed on flat boxes, and where one of perfect form and colour may be found quite unsuitable for decorative effect in a border. In buying them, always try to get old stools in autumn instead
of cuttings in spring; the latter are so apt to die out after one season, possibly from overpropagation. They can be kept in any frostproof building or stored in dry earth, and covered with straw in frost in a shed or cold frame.

They require very rich, deeply dug soil, and do best in the virgin loam of a newly turned field. Although they present a fine mass of colour in full sunshine, they are quite accommodating in the matter of shade, and if they can get even a little sunshine will flower.

The new collarette dahlia is single, and has a curious inner row of little petals, sometimes of a different colour. The stems are long, and as the flowers show up well above the foliage, they may prove a useful addition. "Buttercup," of rich yellow with collarette of pale yellow, and "Simplicity," of white flushed with pink, and a white collarette, sound more attractive than some of the mottled purple and yellow or red and white forms.

Among the cactus dahlias are-Dr G. S. Gray, rosy scarlet ; Mrs Alfred Dyer, lemon and pink ; Richard Box, light yellow; Kriemhilda, pink ; Victory, scarlet; Amos Perry, velvety crimson ; Excelsior, maroon. All are good garden varieties.

Pompon dahlias must not be omitted, and should be $2 \frac{1}{2}$ feet and 3 feet high and a mass of colour all the autumn. Nerissa, a pale pink, is very pretty, and they can be had in yellow, red, crimson, and white.

Single dahlias also are very useful, and can be grown easily from seed, but they are not so much used as formerly; twenty years ago they were in every garden, and were capital for cutting, and very showy.

February and March are busy months, when annuals are needed for the borders. In February snapdragons and pentstemons are sown in boxes of finely sifted soil, and not too deeply covered. After gently watering with a fine rose, the boxes are put into a frame and covered with brown paper (which is taken off in a few days) and put into the greenhouse. When large enough to handle, the seedlings are pricked off into other boxes and gradually hardened off, before being planted out in April. Where no greenhouse is available (the kitchenwindow has been known to take its place), seed should be sown outside in March, April, or May.

There are certain ways of sowing seed that are found successful when drought is to be feared, and one is this. After raking your seed-
bed, or the spaces left in your borders, smooth, well water the bed with a fine-rosed watering can, scatter your seed broadcast and thinly. Have ready some fine dry soil or finest grit, and just cover your seed with it. This is better than having to water the seeds, as the soil is certain to cake. A sharp, gritty soil is best to cover the seeds with. The following are annuals suitable for hot, dry soils, sand or gravel, or for borders quickly burned up by sun.

Nasturtiums in all colours (Empress of India, with blue-green leaves and crimson flowers, is especially fine).

Eschscholzia, the golden poppy of California, and its improved form, Mandarin, bright orange. These can now be had in double forms and in rose colour.

Calendula also in the single and double forms. Tagetes, linum, marigold-French and English and African-also the corn marigold, flowering well into late October, which, though a wild plant, is of great beauty, with glaucous leaves. Poppies and cornflowers, zinnias, sunflowers, nemophila, candytuft, Bartonia aurea, Dimorphotheca, Nemesia strumosa. All these, with the exception of zinnias and sunflowers, should be sown in early March where they are to flower, or in April if in a cold, stiff soil, or if
wanted for late flowering. Always bear in mind the absolute necessity of thin sowing, or else of drastic thinning out when the seedlings are an inch or two high.

Where the seed is very small, such as poppy seed or mignonette, it is well to mix it with three times the quantity of fine sand, then sowing it as carefully as if it were all seed. A plant of mignonette or nemophila has been known to make a growth of 3 feet in circumference, and to sow thickly is not only waste of seed but weakens the young plants. A plan advised by the raiser of the Shirley poppy, the Rev. S. Wilks, is to scatter the seed thinly and broadcast. Then, when the seedlings are an inch high, hoe the bed across in lines 18 inches wide, leaving only thin lines of seedlings. Then hoe across these lines others 18 inches or a foot wide. This will give the remaining plants room to grow and spread. The finest Shirley poppies are grown from seed sown in autumn where they are to flower, and the thinnings can be transplanted in spring if taken up with a trowel with as little disturbance as possible. Zinnias should be sown in gentle heat in April, or in a cold frame in boxes, and then pricked out like stocks and asters. They like a deeply worked soil and feeding, but
the border can be sunny and dry and they will appreciate it.

Nasturtiums do not need a rich soil, as they quickly go to leaf instead of flower, and require a poor, dry border to be seen at their best. The same applies to eschscholzias, statice, and portulaca, whose fleshy leaves stand any drought.

In sowing annuals in a herbaceous border, some of them are sure to get crowded out, or drawn and leggy. Still, they often succeed, and fill many a gap. If colour runs riot in the border in a pleasant jumble without thought (often as effective as anything else), a good plan is to mix some seed of Linum grandiflorum coccinea (a fine crimson), Convolvulus minor and linaria, and scatter over the borders anyhow.

No annuals but Nicotiana really love shade, but some will accommodate themselves to it. Nicotiana sylvestris is a noble plant of pyramidal habit, 6 feet high, with large heads of long tubular white flowers, and brilliant green leaves. The flowers are open all day, unlike affinis, the sweetly scented evening tobacco plant, which only opens after sundown, or in deep shade. There are various-coloured hybrids in pink and red. Nicotiana Sandera is rose-coloured, and there are other hybrids in crimson and purple

tones. Others that will stand shade are candytuft, lupins, larkspurs, mallow, cosmos (if sown early enough), and Venus' navel-wort, a pretty white flower with grey-green leaves, best sown in place in autumn.

The seed of biennials for the herbaceous border needs to be sown in March, thinned out or transplanted, and transferred to the border in September or in early spring.

They include the following :-

Canterbury Bells.-_Blue, white, mauve, pink-double and single ; $2 \frac{1}{2}$ feet. Sow April.

Digitalis (Foxglove).-Yellow, white, rose, purple. Sow April-shady border; 3 and 4 feet.

Lupinus arboreus.-Yellow and white. Sow in April and May-any soil or aspect. Transplant into shady border in September. Flowers in July ; 4 to 5 feet.

Lupinus polyphyllus.-Blue, white, yellow, pink. Sow April—any soil or aspect ; 3 feet.

Myosotis.-Good carpet plant. Sow in open ground, May and July. Varieties :-Alpestris, deep blue; Azorica, violet blue; Dissitiflora, light blue; Stricta, deep blue, upright habit of growth; Rosy Gem, pink; Royal Blue, or Indigo, deep blue; Palustris semperflorens, clear blue, blooms from early spring till late autumn, and is as good in the border as by the waterside.

Enothera.-Acaulis, white; sow April, shady border; 6 inches. Afterglow, yellow with red calyx ; sow April, shady border ; 3 feet. Biennis grandiflora, sow April, shady border ; 4 feet.

Pansy.-Sow April, May, or June, open ground ; will flower spring, summer, and autumn if seed-pods are
picked off; 6 inches. Trimestis; Empress; Masterpiece. Bedding varieties in all colours.

Polyanthus Primrose (Bunch Primrose).-White, yellow, orange, and reds. Sow April, open ground ; transplant to shady borders, or full sun where soil is rich. Flowers in spring ; 9 inches high.

Sweet Rocket (Hesperis).-Purple, white. Sow May, open ground-any soil or aspect; 3 feet ; flowers May.

Salvia Sclarea.-Pale blue and white tubular flowers an inch-long, large rosy bracts. Sow May, open ground; transplant autumn or spring ; 5 or 6 feet high. (True seed very difficult to obtain.) Whole effect mauve. Lasts June to September, rich soil, any aspect.

Sweet-william (Dianthus barbatus).-Sow April, open ground, and transplant; all colours. Flowers June; 18 inches.

Verbascum (Mullein) olympicum.-Yellow ; sow April, open ground and transplant ; flowers July; 6 feet. Phlomoides, bright yellow ; sow April, open ground, and transplant. flowers July ; 5 feet.

Wallfowers.-Sow in June in open ground, transplant once if not twice, plant out in October; flowers in spring; 9 to 18 inches. Eastern Queen, chamois and pink; Golden Queen, or Cloth of Gold, yellow; Blood Red, or Ellen Wilmot, ruby ; Primrose Dame, or Faerie Queen, primrose; Purple Queen; White Dame, cream ; Harbinger, brown.

The List of Annuals at end of book is a very long one, but it will enable different kinds to be grown each year.

## CHAPTER IX

## ONE-COLOUR GARDENS

The arrangement of small gardens in separate colours is specially good where no variety of contour exists-A mauve garden enclosed by yew hedges-A pink and rose-red garden-An orange and yellow garden-A ghost garden-An evening garden.

The owner of a small garden, as a rule, prefers to have a happy medley of all sorts, rather than to go in for a colour-scheme. Naturally, if space is limited, and he already possesses treasures brought as mementoes of journeys, or of friends, space has to be found for them before all. More often, however, he does not realise how great the success of a judicious massing of colour can be, even in a small space, and what an impression some such effect makes on a casual visitor. I have heard for years past of the delight a certain border gave to passers-by, when a long strip of field, taken in to enlarge the garden, had the path edged, broadly, for 150 yards with Shirley poppies
backed by rose-coloured mallows (Lavatera). The glow of pink used to have the effect of taking away one's breath as one came unexpectedly on it.

It may be argued that there is too much sameness about a garden of one colour ; but if there is plenty of variety in other ways in the garden, surely a portion of it need not be grudged for what will prove, in the end, a very interesting picture, and one that will well reward its owner, if the praise that is given by visitors pleases.

A small enclosure of well-kept turf, with a hedge of yew (with cut arches) on two sides, a square trellis of oak (also with an archway in it) on the third, and a low retaining wall of grey stone, with shallow stone steps leading up to a small grass terrace on the fourth, is taken as an example of a garden carrying out a scheme of mauve, purple, and grey. It divides two large lawns, fringed with fine trees, from each other, and has in the centre an old stone sundial standing in a ring of pavement, with round stones let in at intervals, and a path of flagged stones leading across the turf to the steps.

The four sides have narrow borders running at the foot of the yew hedges and trellis.

These are filled with tall lavender at the back, and with dwarf lavender next, while the frontrow plants in each vary. Under the wall there is Phlox canadense, of a lovely lavender colour, flowering in early summer. In another


Plan D.
the first row is all of nepeta (catmint), which blooms continuously the summer through, and whose grey-green foliage is ornamental even when its faint purple flowers are not yet out. The other borders contain, in addition to the lavender, a splendid new mauve-tufted
pansy, Maggie Mott, a continuous bloomer also, if the fading flowers are picked off. Between the lavender are occasional clumps of mauve iris, the tall and almond-scented Pallida, Caprice, and Mandraliscoe, while " Mauve Queen" and "Anton," English and Spanish iris, in new self colours of mauve, come up here and there. The border at foot of the trellis has clumps of Salvia Sclarea, that grows 5 and 6 feet high, and is covered with masses of blossom and bracts of pale blue and mauve. Darwin tulips, Dream, Maes, Rev. Ewbank, Ergeste, and La Tristesse are showing all through these borders, and are in various shades of lilac, mauve, heliotrope, and purple. On the top of the low buttressed wall grows a thick fringe of the Nepeta mussini again, and below the steps, and in and out of the stones, is aubrietia "Lavender," a new variety. Planted at the foot of the sundial, and within the paved ring, are pansies, Maggie Mott again, and a dwarf funkia with lavender flowers and very ornamental foliage.

Four small round beds cut in the turf contain each a plant of Buddleia Veitchii grandiflora. This needs to be cut down in spring, when each fresh shoot will carry half a dozen great plumes of light purple, made up
To face page 136.

Bunch Primroses - Hurst Court.
of hundreds of tiny little flowers, smelling most delightfully of honey.

Four oblong beds each side of the centre grass walk are planted with clematis in varying shades, from the mauve pink of Fairy Queen, so hardy and free blooming, to the purples of Gipsy Queen and Jackmanii. These are kept to one or two stems, and trained up a rod 5 feet high with a ring at the top (only put in in summer and taken away in autumn) whence they hang down, in trails of flowers, on all sides. These beds are filled with Muscari, Hyacinthus plumosus, the lovely mauve feather hyacinth, a close relation to the wellknown Muscari, "Heavenly Blue" ; and their spring covering is of single mauve primroses, and aubrietia.

These are removed later to make room for heliotrope, mauve candytuft, Viscaria corulea, and Brachycome celeste (the Swan River daisy), annuals of varying shades in the same colour.

Two or three big bushes of Veronica Andersonii, with spiky brushes of purple and mauve, are in a corner with a carpet of violets, and a wild vetch of the right shade of colour has obligingly established itself in a yew hedge where it twines and climbs at will. Behind the veronica, a Solanum crispum will flower
when better established, and Clematis Viticella, the small purple-flowered sort, is very rampant over a trellis. The only note of colour other than mauve or grey is the pink of a climbing rose, Papillon.

Endless are the flowers that could be used to fill the beds. Heavy-scented stocks, purple asters, mauve scabious, salpiglossis, pansies of every shade, galega, both dwarf and tall, lupins and campanulas.

A small square garden 24 feet by 24 feet could be arranged in four large rings, with grass paths and diamond-shaped beds to fill the corners of the squares, and devoted to some such scheme as rose reds and pinks (p. 1 39).

The diamond beds in the corners may be filled with hollyhocks, and the large round beds carpeted with godetia in all shades of rose red and pinks (for none of them are of the wrong shade), with pink and rose and crimson phloxes permanently planted at intervals all over the bed. If in a favourable climate, the large square bed in centre of all may be planted with pink hydrangeas, otherwise with monthly roses rising from a bed of mignonette, or pale-blue nemophila for contrast, or even a groundwork of silvery stachys (Mouse Ear). Other diamond beds
can be filled with lavatera (pink mallow), rosy-branching larkspur, and mignonette.

A much-admired garden in the north of


Mignoriette or dwarf lavender.

Plan E.
England has a small garden within it, entirely of the lemon-coloured Calceolaria amplexicaulis, and heliotrope in all shades of purple and mauve.

A similar idea could be carried out with
perennials such as coreopsis and mauve vetch (galega), both of them continuous bloomers.

In America " ghost gardens" are rather the fashion. Here everything is dim and subdued. Under cool, creeper-clad pergolas or shady trees are arranged such misty effects as can be got by the use of large masses of Gypsophila paniculata, the great silver thistle, tall grey mulleins, and of the broad-growing silver salvia or sage as a flat carpet from which rise fragile white campanulas, white moondaises, or white lilies of Bermuda. Near a grey stone seat may be found a large clump of white datura, with heavily scented trumpet flowers ; or, if no frost-proof shed can be found to store the datura, then a group of white Nicotiana sylvestris or Nicotiana affinis, which comes up year after year. Then there are white foxgloves, with white jasmine as a background, on some old wall or pillar ; and Clematis Flammula (or, earlier in the season, montana) wreaths itself in and out of bay or box, and even tall junipers standing like sentinels do not escape, but are caught in its embrace. A small marble basin with water-lilies growing in it is sunk in the cool green turf, the water reflecting the early moonbeams; for no one walks in the ghost garden except at evening.


Such a little garden, a cool retreat, with the flowers not massed, but rising in groups from a setting of fern fronds, would, however small, be a welcome change on a hot summer day, especially if on the way to it one had passed beneath some vivid Crimson Rambler archway, or by a blazing group of Red-hot poker and montbretia, tiger lilies, or a bed of dimorphotheca, bright enough to dazzle one.

Should there be anyone who, when at home in the evening, prefers to sit quietly out of doors rather than water or hoe the garden, then prepare for him some nook where such plants as Nicotiana affinis and Matthiola (night-scented stock) pour out the fragrance accumulated during the day, and withheld till night. Schizopetalon Walkeri is another annual which only opens in the evening, and is delightfully scented. Evening primroses in different heights and in colours white and rose, as well as the better-known primrose, will add to the beauty of the scene, even if their scent is not so easily detected as in the others mentioned.

In a very little garden, which is all the better for being cunningly planned, much can be done by the use of sweetbrier and other hedges to delude the eye and make it seem
much larger than it really is. To cut up a large garden in such a fashion as this would be unwise. It would merely look spotty, and would interrupt the simple lines and long vistas which are its chief charm.

A grey garden is perhaps more curious than pleasing, but the collecting of all the greyfoliaged plants that are sufficiently hardy for this climate is of interest to some people, and they would not take up a very large space. Some of them, such as the silver salvia, do not like damp nor cold soils, and should be planted on ground sloping to the south, and with a shelter of such hardy grey shrubs as Sea Buckthorn and Eucalyptus gunnii. Eucalyptus globulus (tender as a grown tree, but hardier in youth), hollies, and evergreen oaks take on a blue-grey shade in the distance and would be a good shelter. Of the very tall grey plants, Eryngium giganteum is a striking specimen of thistle, of metallic silvery tones, white like new silver, and on a dry soil is hardy, and seeds itself. A charming grey-foliaged plant is Artemisia stelleriana, quite hardy, and preferring a cool or shady place. A good carpet plant is Stachys lanata, also quite hardy, and commonly known as Lamb's Ear, owing to its soft and woolly texture. Salvia argentea is a
fine border plant, low growing, with flat leaves io inches long, and known as Silvery Clary. Campions have very pretty grey leaves and stalks, with rose-coloured flowers. Cineraria maritima has deeply indented or cut leaves of a whitish, floury grey, but is not hardy, alas, for it makes a beautiful carpet or edging, as does also the common pink, which can be kept quite tidy, if clipped back after flowering. Globe artichokes and cardoons are some of the handsomest grey-foliaged plants we have, and grow into big clumps 3 feet high. Santolina is a small bush, easily propagated by cuttings or divisions into single stems. It is apt to get straggly if not cut well back in June, but a new variety has been recently introduced which is quite compact. There are several silvery saxifrages, longiflora being especially beautiful. From the deep clefts of rocks in Norway it falls like a lace veil, draping the high walls with its branching stems, 2 feet long, of lovely white flowers. Here we never see it save tied to a stick in a pot, and growing upright. There are one or two blue and silver plants such as Echinops ruthenicus, 3 to 5 feet high, with round blue thistle-like flowers, and leaves covered with silvery down. Abies glauca, of lovely silvery blue, is so
beautiful in colour that, although a conifer, it must be given a place in the grey garden, but not where it can be whipped by the leaves of other trees and so stunted in growth ; give it a centre place in a border or bed rising from a carpet of grey foliage, say of cerastium, another useful grey, though spreading like a weed in a border.

Last but not least in value comes the most beautiful and most distinct plant of recent introduction, Perovskia atriplicifolia, a cloud of finest, most slender stems of silvery grey, some 2 feet high, branching in all directions from the ground, with bluish-purple flowers of small size encrusting them.

To evade sameness in colour it would be easy to arrange some good clumps of pink gladiolus with the large grey artichoke, and a bed of rosemary, lavender, and monthly roses would harmonize well with the rest. A few tall spires of lemon-coloured hollyhocks, or the woolly grey of the yellow-flowered mullein, would look well against the soft background. Greys need soft tones with them if colours are used. Not rich purples, or crimsons, though a splash of orange lilies, croceum or tigrinum, would not look amiss. Evening primrose is happy in a shady corner ; and white bergamot,
the flower of a very greyish-white almost like seed vessels, and Gypsophila paniculata, the single variety of which is a smoky grey, really must not be omitted.

A colour-scheme in brown, yellow, and orange is stronger and more showy than the last, but perhaps to the collector not so interesting. Here one could take a copper beech as one's note of colour to start from, or a Prunus pissardi, and bear in mind as one goes on the colourings of the azaleas, with their purple-red leaves in autumn and their flower-tints of salmon, orange, cream, and flame. One or two purple nuts, much the same colour as the copper beech, but not growing more than 7 or 8 feet high, have a handsome habit of growth and fine leaves, and bear excellent nuts of the same purple. They make a good background.

With them I would associate the red spinach, which sows itself annually, and when in seed is a very graceful plant of good wine red. Also the tall cream and lemon-coloured sunflower, and pale yellow hollyhocks (single), and tall, creamy-yellow scabious, and spiræas, aruncus and filipendula. Next to these might come some groups of tritoma in the many shades now obtainable, orange, scarlet, and lemon, and
in heights varying from 1 to 6 feet. In and out of these a large stretch of Alstromeria aurantiaca and chilensis, in their colourings of salmon, orange, and yellow, in fact in all the colourings of the azalea, African marigolds, nasturtiums of every shade, and the brown of beetroot and the small brown clover (oxalis) ; and, should the soil be moist or rich enough, a spreading plant of Rodgersia, with its handsome rich brown leaves; while in a sheltered place the brown and purple-leaved cannas will come, their flowers all following the same line of brilliant colouring.

Lobelia cardinalis, with lovely purple leaves and velvety scarlet flowers, needs to share this sheltered place, and is so beautiful that it repays over and over again any little extra trouble bestowed.

## CHAPTER X

## BLUE GARDENS

Description of natural blue gardens-Of a carefully thoughtout garden-A blue terrace border-Names of suitable plants.

Nature, the first gardener of all, has given us wonderful examples; it would be difficult to rival, impossible to surpass, such pictures as a glade of bluebells in spring, rising from a background of filmy fern, and the pale and tender green of young birch leaves. Or, in other countries than our own, azure carpets of Anemone blanda, melting into the blues of a Grecian sky, or the gentian-covered slopes of the Swiss Alps.

Still, a very beautiful effect may be attained where advantage is taken of the natural features of the garden to be planned. For instance, take a garden where all the hydrangeas come blue, from china shades to a rich lapis-lazuli. Here the scenery is generally that of mountain and lake, or sea ; or at any rate the background or view can be sometimes of blue hills
with their varying and ever-shifting tones. Perhaps a bold planting of the blue hydrangea could be so arranged that the mass of flower in deep blue tones stands out, with no intervening shrubs or trees or grass, against the paler blue of the mountains.

This, a perfectly natural effect in parts of Cape Colony, might well be copied in such favoured places as Wales, Cornwall, Ireland, and wherever the absence of lime in the soil, or the presence of iron, turns the ordinary pink hydrangea into that lovely, satisfying blue (not the grey and slaty effect produced by alum, and home-made efforts).

A very charming blue garden has been made by Mr Percy Noble at Park Place, Henley. There a deep hollow on the side of a hill, used for a century as a dumping-ground for dead leaves and garden rubbish, has been transformed. It is shaded by large trees on one side and is open to the sun on the other. A path curves round the hollow down to the bottom, where is a small lily pond. Massed along the sides of the walk are all the blue flowers that can be found, or that will grow ; and, as great care has been taken to eliminate any colours that clash, a very charming effect has been obtained. In late summer, when it is difficult to get a

sufficiency of the colour, clumps of white Bermuda lilies are added, and concealed tubs filled with blue agapanthus. Some of the more graceful tree stems were left when the undergrowth was cleared out, giving partial shade to masses of ferns.

Many of our best gardeners do not believe in a border entirely of blue flowers, and in most cases it is well to exercise individual taste, occasionally breaking an otherwise monotonous scheme by the introduction of some grouping of grey-foliaged plants such as Artemisia cana and frigida, stachys or santolina, or the glaucous green of Funkia Sieboldii, and the vivid green of Funkia japonica. White or cream-coloured flowers always look well, and Campanula persicifolia alba, with white bells on tall, graceful stems, some of the creamy spiræas, a good white phlox such as Sylphide, and white foxgloves, may be used. The tall, pale-yellow Thalictrum glaucum and Gaura Lindheimeri, in long slender spikes of pink and white, look well against Eryngium planum or echinops.

A terrace garden could be made very interesting if planted entirely in blue flowers, care being taken to eliminate all muddy or dull shades such as tracheliums or ageratums, with a mellow, pinkish brick wall as a background,
or a soft grey stone. Here can be planted ceanothus (Gloire de Versailles), with soft, feathery blue plumes in pastel shades, ceanothus indigo, with shining dark leaves, and darker blue flowers, and the major convolvulus. In the south one may grow the lovely blue sollya, and Vitis heterophylla, that fascinating vine, bearing berries of vivid turquoise on the same bunch as its half-ripe ones of purple and mauve, shining like some fairy gems. People who have not seen this growing, find it impossible to believe their senses when told that it is not the product of some most artistic jeweller. It is very unlike any other growing thing. In hot seasons such as IgII this fruited well at Hurst Court. Even the foliage is exquisite, like miniature vine leaves.

A carpet of scillas, muscari (Heavenly Blue or Cambridge blue), chionodoxas, all easily grown and inexpensive bulbs, would be over in time for forget-me-not, Omphalodes verna (Blueeyed Mary), and Anchusa sempervirens to flower. The last is a native plant and most useful, its forget-me-not-like flowers continuing till autumn. But it must not be allowed to take possession of the border.

Mertensia virginica, a real gem, is not difficult to grow if well-established clumps can be
bought and planted in dark peaty soil, half shaded, and not damp. It is 18 inches to 2 feet high, with china-blue bells and brilliant glaucous foliage. Mertensia echioides, a few inches high and of a rich blue, flowers continually through the summer and autumn. This and the lithospermum, Heavenly Blue, and purpurea-ceruleum could be planted in masses in the front of the border, with Veronica saxatilis flowering a little later, and gentian as an outer edge.

Myosotis palustris in the newer form does remarkably well as a carpet plant, and does not require the cool ditch or stream it is usually associated with. From amongst it a group of Veronica amethystina would look well, backed by Salvia Tenori, a perfectly hardy dark or indigo-blue salvia; while Linum narbonense and $L$. perenne, the first sky-blue, the second cobalt blue, are about the same height (I to 2 feet). Next to these, and running further back, might come a planting of Anchusa Opal-a very graceful plant of light branching habit, and much paler than its companion, Anchusa Dropmore, growing 3 to 4 feet high; while noble groups of Delphinium belladonna and its seedlings would carry on the same shade of cobalt.

A couple of plants of variegated comfrey
(Symphytum officinale), with bold silver and creamy-white leaves and hanging bells of soft blue, could be used to make a break, and lead up to a group of the fine delphiniums, such as Belladonna, Captain Scott, Gloire de Nancy Wilson, Persimmon, and Mrs Thompson.

No larkspurs with mauve and pinkish tones should be admitted, beautiful though they are, as they do not harmonize with clear blues such as Persimmon ( 3 to 4 feet).

The Caucasian comfrey is worthy of a place. The flowers open like a small campanula, and are of a delicate blue; it is 12 inches to 18 inches high.

In September flower Salvia azurea and Salvia azurea grandifora-tall, graceful stems, with fine dark leaves all the way up, and spires of blue flowers lasting till October. Plumbago larpenta, with azure or cobalt flowers 9 inches high set off by crimson leaves, is much used in Italy for bedding and borders. It is perhaps the only plant that flowers after its leaves have turned from green to red in their autumnal tints, and is most effective and easily grown.

The blue and silver of the sea holly or Eryngium amethystinum strike a distinct note, and would look well near Elymus glaucum

To face page 152.


Foxgloves - Milton Court, Dorking.
(blue grass), which would enhance its "gris de Flandres" colouring.

Veronica spicata, Pentstemon glaber (rather tender, but lovely), and Catananche corulea must be noted. Lupinus polyphyllus, centaurea, dark blue aconites, Geranium pratense, and dark blue tradescantia, if kept together and perhaps separated from the other blues by some grey-foliaged artemisia, would make a dark, purple-toned effect, but must not be near any of the cobalt blues, such as Commelina celestis; for though the flowers of the latter close about 5 p.m., they are most vivid in colour. But Commelina colestis is a charming plant, and blooms till the frost, or the gardener, cuts it down.

If a poor dry corner has to be planted, get some of the wild chicory, which loves chalk, and whose sky-blue flowers baffle description. A never-to-be-forgotten memory is that of this lovely wild thing, growing from among the tombs of the Capulets in Verona.

One or two of the Michaelmas daisies are very blue, such as Robert Parker and amellus, and bloom too late to clash with other things ; while the early blue Wilson primroses would need to be kept away by themselves, as they so often become slaty or even purple in tone.

One must not exclude Salvia patens (though only hardy in some places), as it gives a mass of the most perfect and satisfying colour just when most needed in August and September, and it is easy to house cuttings in a cold frame.

It is quite possible to make this border entirely of perennials, but the addition of a few annuals and bulbs help greatly; blue Spanish and English iris once planted come up year after year, and the foliage when dying down is hidden by the perennials. Camassia esculenta permanently planted is a beautiful and too little known flowering bulb in a fine shade of blue, and the pale blue October crocus is a gem.

Annuals, such as the rich blue anagallis (giant pimpernel), the gentian blue Phacelia campanularia, are easily grown; while Nemesia cerulea, if sown in place in April, gives masses of sky-blue flowers until September, and resembles a tall but compact pale blue forget-me-not.

The annual cornflower is good, and so is lobelia, grown in patches and not in rows ; and some of the violas or tufted pansies are quite blue-Blue Cloud, for instance. A new race of gladiolus has been produced of quite a full rich indigo shade, Blue Jay the best.

Tubs down the terrace-walk filled with
agapanthus, Plumbago capensis, and blue hydrangeas, would be very effective ; but it must again be impressed on the reader that though lists of plants may be given as a help for names, and particularly for colour, the arrangement is the outcome of the individual taste of the owner of the garden, and is the outward expression of the inmost feeling of that owner, in the same way that no two artists render the same scene in the same way on canvas, though each rendering may be beautiful.

The varying heights and requirements of the blue flowers mentioned in this chapter are all given in the Alphabetical List at the end, also a list of blue flowers in pure blue tones.

## Delphiniums of Clear Blue with no Touch of Mauve or Purple in them

Belladonna Seedlings Clear light blue.
China Blue . . Colour to name with white eye.
Kelway's Azure . Pure Cœerulean.
Blake . . . Bright blue, white eye.
Langport Blue
Countess of Ilchester Sky blue, white eye, single flowered. Norah Tusan.
True Blue . . Clear deep blue.
Persimmon . . Clear light blue.
Christian Kelway . Sky blue with white eye.
Cineraria . . Rich deep blue.

## CHAPTER XI

## THE MASSING OF DISTINCT SPECIES

Iris gardens-Michaelmas daisy gardens-Pæony gardens -Snapdragon gardens-Evening gardens-Lavender gardens.

There is an increasing tendency toward the cultivation of flowers in separate gardens, where one species of plant in all its varieties may be grown. Where the space at command does not permit of a garden, then a border may be given up to it ; but a small enclosed space with hedges of clipped beech, or some evergreen, giving shelter and shade or sun as required, has great advantages. There is no doubt that a large number of pæonies or asters seen together has more effect than when they are dotted about among other plants in a mixed border. It has long since been discovered that roses look best when kept together in a rose garden or rosary; and in the same way people are beginning to appreciate flowers, other than roses, massed together. There is
To face page 156.

also a great deal of interest attached to the getting together of a collection of different varieties of the same family. Some collect pinks, others auriculas; some find they are satisfied with daffodils in their hundreds of different kinds; but the quest of some old, rare flower in an out-of-the-world garden, or in some small country nursery garden, is as keen a joy when rewarded by a find, as is that of the collector of prints or china who finds some piece just needed to round off his collection. To others the acquisition of the newest has the same effect ; and, again, there are those to whom the joy of securing a lovely picture in different tones and colours of one flower, such as the wallflower or the primrose, is sufficient reward. And for those who perhaps can only visit their gardens at certain seasons of the year, this is one of the best ways of enjoying them.

There are some gardeners who, knowing either through pictures or from old catalogues or books, that certain forms have once existed, will leave no stone unturned to find that particular plant again. Some of the double rockets have been reintroduced through the untiring efforts of a devotee; and there is a certain white pink, with a black blotch on it,
that I well remember when a child, and which, up to a short time ago, had eluded all my efforts to find it again.

Some of the flowers known to our forefathers as long ago as 1662 were very beautiful. In a picture by Van Verendael painted in that year, and now hanging in the New York Museum, all the flowers except the hyacinth are as fine of their kind as anything we grow now. Among them are some large red and white carnations with a fringed edge, poppy anemones, Florentine iris, white and yellow jasmine, auricula, ranunculus, rose (pink cabbage and white Madame Plantier), blue hyacinth, scilla, scabious, honeysuckle, red and white tulip (like Zomerschoon), double daisy, Althea frutex (white and red), and a large-flowered yellow buttercup. I wondered rather how tulips, scillas, and auriculas could be found in flower at the same time as Althea frutex, yellow jasmine, and carnations, but possibly this is painters' licence. In the same way Zola dared to use flowers of spring, summer, and autumn in his wonderful description of the flowers that the girl in "l'Abbe Mouret" heaped on herself, to die under the weight of their perfume.

To return to our gardens of distinct species,
we will take the iris as an example. The iris is about the easiest flower to grow that there is. The old Blue Flag seems to revel in the dirt and smoke of London, and its generally poisonous conditions of soil and atmosphere. Poor soil and hot, sunny corners, drought, stiff clay, damp and shade, none of these conditions seem seriously to affect it. The more recently introduced varieties, from Japan and the East generally, are difficult to grow; but as a family the iris, taking them all round, are perhaps the easiest to cultivate, and from the long period over which the flowering of the different kinds is extended, one of the most satisfactory of which to form a separate garden, or even a border. No green-fly to fasten stickily upon them, and no mildew, as in a rose garden. No wire-worm to devour them, as with carnations. No mysterious damping off, no wilting away without rhyme or reason, as with clematis. Sturdy, clean, and healthy in growth, leaves of clear-shining greens and greys, of sword-like habit, and always beautiful and decorative.

They are perhaps a little particular as to the season for removing and transplanting, but where so little as this is demanded, need it be even hinted at by way of disparagement? Full
sun and a south aspect suits them best ; but yet they have been known to do well in a shady and rather damp border ; and although they will do their best to grow and bloom in a poor soil, and succeed better than most plants in the attempt, they require a well-dug and manured border to really do them justice.

Should anyone succeed in getting together a really representative collection, he can obtain bloom for nine months in the year.

They are most useful as cut flowers; for, picked in bud, they travel well, and open in water, sometimes with more perfect blooms than when exposed to climatic conditions of wind and rain out of doors.

Unlike the pæony, they are cheap enough for a poor man's garden, and of endless interest to the collector or botanist, while their beauty is undeniable. Every shade and colour is represented, and blue, purple, lilac, yellow, brown, bronze, cream, white, crimson, pink, green, and even black are found. Several of these are deliciously scented: Iris reticulata, with the fragrance of violets; Iris graminea, with that of a ripe apricot or plum; while Iris pallida has a perfectly indescribable scent which makes one long to go on smelling it till one can find out of what it is reminiscent-is
it Vanilla pods or almond essence ? Not quite, it has a fresher, cleaner scent than that, like some fresh fruit.

In making a garden for them, either of the small square gardens mentioned before (see plans, pp. 99, I 35 , I $39, \mathrm{D}, \mathrm{B}$, or E) would be very suitable for the purpose. But it would be well to have one or two of the borders raised some 18 inches or 2 feet, and banked up with stones, unless there is already some low retaining wall on the top of which a border may be made, in order to give the right cultural treatment to those of the iris family that require special attention. Such a variety as persica, of the xiphion or bulbous iris family, requires a well-drained, even stony soil, so that its long roots may ramble at will, and a sunny situation in order that the bulbs may be thoroughly well ripened after flowering. Iris pumila and Iris stylosa require the same conditions, and with raised borders there should be no difficulty in growing any of these. A narrow border at the foot of the stones that hold up the raised portion can be utilized for some of the larger sorts of iris with creeping rhizome or roots.

Since the late Sir Michael Foster and others started crossing the different races of the
flower, an enormous increase in the different varieties has taken place. Indeed, it is almost impossible to deal with lists of them in such a limited space as in this chapter. But if any good catalogue from a specialist in this plant (and there are several) be referred to, it will be seen that their name is legion, and that they flower in succession from November to July, beginning with stylosa and ending with some of the new hybrids in July.

In December, reticulata commences to bloom ; in January and February, Alata and other bulbous iris.

Iris reticulata in a light soil that has had plenty of enrichment, and wood ashes and charred refuse worked in, is very happy, and will blossom in sheets in February. A neighbour has just brought me in a large bunch of them, and tells me the picking of them has made no difference to the appearance of the border. They are of a deep violet, almost a dark blue, with quaint orange blotches, and a generally spiky effect when arranged in a large bowl. They spread rapidly when well established, and when brought into the house smell like violets, with a spicy touch as of a crushed geranium leaf, or of a fir tree, perhaps.

In March and April we get the Pumila and

Crimean irises. Then the Intermediate, a cross between the German iris and olbiensis, not so tall as the German iris and flowering two or three weeks earlier, many sweet-scented, and all specially suitable for massing and broad effects.

The German iris, to which belongs the old Blue Flag well known to all, flowers in May and June, and includes the handsomest and easiest grown of all the iris family. They, together with all the rhizomatous or creeping-rooted iris, grow rather on the top of the ground, especially in damp soil, certainly only just below the surface. They appreciate a good mulching of old cow manure over their roots in March, also waterings of weak liquid manure during the summer.

They may be moved, like many another good thing, in full bloom if given plenty of water overnight, and if carefully lifted without disturbing the roots, and are increased by dividing not later than August or September. Some say even earlier, if they can be well watered.

Under the various sections of Amœna, Aphylla, Neglecta, Pallida, Squalens, and Variegata are to be found the most beautiful and best known of them all.

Of the Germanica section, Kharput, a purple with velvety blackness in the falls or lower petals of the flowers, is particularly fine ; so is Purple King, and Kochi, rather a redder purple, and very lasting.

Of the Amœna section, Victorine, with standards or upright petals, white-edged and blotched with purple-veined white, is about the best ; while Mrs H. Darwin, also white and purple, is the freest flowering of any iris.

The Aphylla (plicata) varieties are all white with frilled edges, and of these the best is Madame Chereau, white, edged with azure blue. Among the Neglecta section Black Prince stands out, with mauve-studded, purpleblack falls.

The Pallida section is a very beautiful and interesting one, the different varieties growing 5 or 6 feet in height and many being delicately scented, the old Pallida still holding its place among the new sorts. Caprice is of a particularly pleasing shade of rosy mauve, and Queen of May is almost pink, Her Majesty being even better. Many of them are lavender or palest blue, and Dalmatica, Carthusian, Caterina, and Walner are all in these colourings.

The Squalens group contains many curious
shades of fawn and mauve bronze and purple, smoky lavender and yellow, Madame Blanche Pion and Nibelungen being two of the newest. Of the Variegata, Darius, brown, white, and primrose, and Gracchus, pale yellow, marked with crimson veinings, and very free flowering, have received a first-class certificate from the R.A.S.

The Monspurs, a race raised by the late Sir Michael Foster, have large flowers of good substance, and flower in June and July freely. They include Dorothy Foster and A. J. Balfour. All the Michael Foster hybrids are interesting not only for their beauty, but because definite records of their parentage have been kept. Others besides the late Sir Michael Foster who have done good work in raising new varieties are M. Caparne and M. Tubergen.

A fine bold iris from the Himalayas is Aurea, growing 5 feet high, with large purple and yellow flowers.

Flavescens, too, is a good primrose-coloured flag ; and Florentina is the well-known white iris from which "orris root" is procured for perfumery.

Iris Delavayi is violet in colour, with tall, narrow leaves, and prefers a moist border.

Iris fotidissima does well in some damp spot, and, though the flower is quite inconspicuous, the scarlet-berried seed-pods succeeding it are invaluable for winter decoration in the house. Its variegated form, with white and green leaves, is one of the best border or decorative plants we have.

Graminea is not often seen now in gardens, but the foliage, like very green grass, and slightly ribbed, is most useful for cutting ; and the little mauve and blue flowers, half hidden among the leaves, are scented like a ripe apricot kissed by the hot sun.

Japanese or Kæmpferi iris are all suitable for an iris garden where there is a stream or pond. They need to be planted in swampy ground, or on the margin of a stream, and in full sun. Where they like a soil or site, they will grow into clumps 3 or 4 feet high, with quantities of thin, flat, almost clematis-shaped flowers, in wonderful colours of crimsons, purples, and mauves, splashed with white, and sometimes 7 inches across.

The Oncocyclus and Regelio species come from Palestine, and are so beautiful that it is said that anyone who has once seen one becomes straightway bitten with the madness to try and grow them-and madness it is,
unless their special needs have been carefully studied.

As they come from a hot, dry climate, the only way to approach the climatic conditions they require is to place glass lights or frames over them directly they have finished flowering, so as to ensure them a thorough baking and drying off in the sun. Their quaint shape and network of black lines on a greyish ground, as in Susiana, or black lines on a rose-coloured ground as in Sortelli, are unique.

As the Oncocyclus is the most difficult to grow, so is the Spanish or Iris Xiphium the easiest and cheapest, and as beautiful as any. For massing or in long borders it is unsurpassed, and its only drawback is the untidiness of its foliage when the flower is over. Some of the new varieties are L'unique, dark and light blue; King of the Whites, very large; Souvenir, pale blue and French grey; and Walter Ware, straw-coloured.

The English iris, xiphioides, flowers a fortnight later than the Spanish, and has much larger and heavier-petalled flowers, more like the Japanese iris, and is not a bad substitute where that latter will not succeed, for the English iris will grow anywhere. Lilacina is perhaps the loveliest, with large flowers of
lilac and pale blue. Mont Blanc, pure white, Nimrod, deep purple; and Anton, lavender flecked with rose, are all fine varieties.

Anyone growing English and Spanish iris in quantity would do well to sow seeds of some annual such as gypsophila or nigella in the same border, for it will spring up and hide the yellowing and dying foliage which otherwise is so unsightly.

## Michaelmas Daisies

Of all flowers that really need a garden to themselves, the Michaelmas daisy is unquestionably first. For catalogue purposes the name "aster" must be retained, but they are also called "starworts," an imported name much used in America, where these flowers, together with Golden Rod, grow wild in all woods and waste-places. There is even a tiny variety that I have seen growing in fields, a weed some 4 inches high.

No frost will touch these hardy things. All they want is room, room to branch out ; and to show them to the best advantage they should be grown among low-growing shrubs that will support them. Otherwise, if grown in an open space in any quantity, the labour of staking and tying will be great ; and yet
without it rain and wind will play havoc with the flowers and long stems of the newer varieties.

Rich soil they should have, but sun or shade makes no difference to them.

It must be borne in mind that the garden or space of ground given up to them will be vacant for some months of the year, except for their green growth, and it is an uninteresting dark green at that. The early varieties commence flowering in August, and the bloom then from one or other is continuous till November ; and in 1912, in early November, masses of a late white sort not fully opened were picked and brought into the house, where they opened and lasted three weeks in water.

Here can be planted out all the "cast-offs" either not thought good enough for the herbaceous border, or the offshoots gained by the too rapid increase of the parent plant, which, as has been pointed out, must be divided each year.

Here we can have our old favourites of the originally wild species-amellus, acris, and cordifolius-as well as the newer sorts. Here we can have drifts of pink merging into crimson by making use of Coombe Fishacre,

St Egwin (very good), Versicolor elegans, white changing to pink with age. Perry's pink, Lil Fardell, Mrs Rayner, Captivation, Perry's Favourite, Ryecroft pink, Mrs Twinam and Madame Cacheux, the soft lilac of Diana, the mauve of Top Sawyer and acris, Hon. Vicary Gibbs, Climax, and hundreds of other mauve varieties melt away in the purple shadows of grandiflorus, Gloire de Cronstadt, Mrs Wright, Novæ Angliæ, pracox, and Ryecroft purple; while the white varieties, which are the first and last to flower, Cordifolius albus, Snowdrift, Chastity, Perfection, Tradescanti, and Vimineus, all are good.

## A Pefony Garden

This is largely dependent on the amount of money forthcoming for its establishment, and also on the patience of the owner, as this plant needs some two or three years to get established and to be seen at its best. Should he already possess a good many plants scattered about his garden, and perhaps not flowering (a very general complaint), then let him consider whether they might not do better if collected, divided out if necessary, and placed all together in one place-be it a little garden or only a border-where attention can be
given to their special needs, namely, feeding by mulching with manure or copious waterings of weak liquid manure from spring onwards, and a south-west, west, or north-west aspect.

It is not a satisfactory plant to grow in any number in one's herbaceous border ; it takes up too much room, its flowering season is short, and it is difficult to "do it" as well as one would like in a border with other plants.

It is an eminently satisfactory plant to grow in a shady place, where it will grow luxuriantly and the colour of the flower be far finer than when exposed to full sun, though in the latter case their growth is perhaps more stocky. In no case should they be transplanted later than September, unless it is necessary to divide them, when it can be done just as they are starting into growth in April, and they will take one or two seasons to recover. They should be planted 4 feet apart in ground trenched 3 feet deep, with plenty of good, well-decayed cow manure half way down the trench, but not touching the roots.

Their prices vary from is. to 2 s .6 d ., the old double crimson officinalis (once used in medicine) being only 7s. 6d. a doz. No one
who has grown the new varieties cares for this now, unless massed on the edge of a shrubbery or in grass. The flowers are too lumpy and heavy, and the stalks are not long enough, though the pink and white varieties are fine for grouping and flower in May and June. Pronia sinensis, the double Chinese pæony, has entirely ousted them for borders, and is very beautiful, flowering in June and July. Among the better-known varieties are Artemise, pale pink, the guard petals of a deeper pink; Marie Lemoine, white, the petals slightly tipped with crimson, and very large and full ; Nobilissima, deep rose, with conspicuous yellow anthers in centre; Couronne d'Or, large creamy white, while some of the newest and most beautiful include l'Élégante ; Michant, rose colour, large and double; Mona, pale rose, but equally large and full, very sweet-scented; General MacMahon, cherry crimson, large and full; Duchesse de Nimours, white, large, very double; Lemon Queen, outer petals white, centre entirely of yellow anthers; Brunner, lemon white and very double; Decandole, rose, very large and sweet; Agnes May Kelway, soft pink outer petals, yellow anthers, and pink centre; Leda, also pink, but the

anthers of an apricot yellow and guard petals white ; Lady Carrington and Abantis.

Some of the single pæonies are beautiful, and flower earlier than the Chinese, namely, during May and June. They include officinalis, deep crimson, as is anemonaflora, the centre being a mass of crimson stamens tipped with yellow; Beauty, with large pink flowers; Duchess of Portland, pale pink ; Hecate, bright pink; Iceberg, white, with rich yellow anthers; Russi, rose mauve; and tenuifolia, crimson, with curiously laciniated and cut foliage.

One of the chief beauties of the pæonies is the crimson-red colour of the young leaves, stalks, and shoots in spring; and their beauty can be set off if some of the finer sorts of narcissi or daffodils are planted with them, the grey-green leaves and white and yellow of the flowers enhancing the rich reds of the pæony leaves, which, as they expand, in their turn hide the dying foliage of the daffodil. No coarse-leaved daffodil such as Sir Watkin or Emperor should be used, but Duchess of Westminster, ornatus, or Tenby are good.

I have heard of pink mallows being sown in the pæony borders, but I can hardly doubt that the pronies suffered from the association,
though the owner stoutly asserted that both flourished exceedingly well. If his assertion is correct, it would be a good way of beautifying an otherwise wasted border in August and September. My own pæony border has an edging of saxifrage, and is planted with narcissus, while behind is a row of Michaelmas daisies divided and replanted each year. When the pæony foliage is at its worst, the Michaelmas daisies can be staked out to hide it.

The Moutan, a tree pæony, does not find a place here, as it is properly a shrub.

## Snapdragons

In Sussex, where surely all flowers take on brighter tints than in an inland county, was a delightful little garden all of snapdragons. It had many small beds in the centre (knots they were called in Tudor days), and borders surrounding it, all filled with these charming, old-fashioned flowers. Not the magenta and spotted kinds of our childhood, which had funny mouths that pretended to bite our fingers when pinched surreptitiously by our elders, but lovely, tall branching kinds, in all shades of colour except blue-sulphur, lemon, orange, vermilion, salmon, cherry, pink, blush and white, and many dark purples, crimsons,
browns-almost black, so deep is one. These were in all heights, from the dwarf front row of 9 to 12 inches, through intermediate varieties up to 3 feet. Many of the beds were massed in distinct colours, but, curiously enough, the more effective were those that were mixed. All the surrounding walls and terraces were of old grey stone, and it made a very pleasing picture. It would be interesting to know if the plants withstood the winter, for if they find it dry enough for them to live through rain and cold, they make magnificent bushes the second year. A seedling at the foot of a wall here in Berkshire was 5 feet high at two years old, and it was a glorious mass of bloom last year.

Snapdragons, though generally grown from seed, can be easily propagated by cuttings, and then make earlier plants, and any desirable seedlings may be perpetuated in this way. If kept pinched, once when 4 inches high, and once again three weeks later, they make fine bushy plants.

For the benefit of the beginner, I may say that it is the small side-shoots of the snapdragon that are used for making cuttings in August and September, and are best taken off with a heel ; that is to say, you hold the stem
firmly with the left hand, and with the right you take hold of the little shoot that has grown out of the side of the stem, and with a sharp little pull you strip it downwards from the stalk. It then comes away with a little bit of the old stalk attached to it, which is called a heel. This method of taking cuttings is also adopted for propagating pentstemons.

The cuttings should then be inserted in boxes of sandy soil or old potting refuse, stored in a cold frame all winter, and transplanted in spring to where they are intended to flower. Or they may be put in in sandy soil out of doors in a warm corner. In planting the cuttings, be sure to put them in very firmly. A good plan is to make the soil firm by means of a brick, draw lines across some inch or inch and a half deep with the back of a knife, lay your cuttings in this little trench, 2 or 3 inches apart, cover up with soil, and make all firm again with your brick.

## A Lavender Garden

On hot, dry soil, where it is difficult to get some of the finer herbaceous plants to flourish, a lavender garden is often a great success. There are now several sorts catalogued, tall and short, dark purple and light purple and
white, so that a certain variety in height and colour may be obtained. One such garden has been used as a foreground in quiet colouring for a particular view ; the ground beyond a sunk fence sloped away rather sharply, so that the masses of lavender, running up to the edge of the ha-ha, gave an effect which the green of the fields beyond could not.


Plan F.
In the garden of the Hon. Mrs Edward Lyttelton at Overstrand is a pleasant parterre known as "Lavender Square," where great hedges of lavender, loving the light sandy soil, enclose a grass plot, the only relieving colour being given by a huge brown basket filled with pink ivy-geraniums in the centre.

There is very little trouble in a lavender garden ; and, for anyone who is only in his garden in summer, it is an ideal plant to grow.

In one year it is beautiful, in two it is at the height of its perfection, after three years it is old and straggling and must be uprooted and replanted. ${ }^{1}$ One thing is needful, and that is to clip it back after the heads have been gathered; or, if these are left on the plants, in early September, when they have faded. This keeps the plants trim and neat and is very important. If clipped in March there will be no flowers that year.

1 The exception that proves the rule being a fine hedge twenty years old at Beacon Place, Lichfield.

## CHAPTER XII

## SPRING AND AUTUMN

Importance of sheltered and slightly shaded positionWinding walks-Main paths-List of plants suitable - Autumn effects - Golden glory - Brilliant colouring.

Early spring is not a very interesting time for the lover of herbaceous plants. Certainly he has much to do in the way of dividing and replanting, and March is perhaps the busiest time of all for this work. All the phloxes have to be pulled to pieces and replanted in well-enriched and well-dug soil, and the delphiniums to be divided where necessary to increase stock. They do not need to be divided so often or so thoroughly as the phloxes do, for they will flourish for years in the same clump if good manure is given to the roots. One way of dividing them is to take pieces from the edge with a sharp spade, filling up the holes that are left with good manure. Pyrethrum can be divided, and many another
perennial has to be propagated at this time rather than in autumn. (See Alphabetical List.)

But there are not many flowers. Mertensia Virginica is just beginning to show its purple head of tightly packed foliage, soon to expand into its lovely arching stems hung with precious bells of rarest blue, Omphalodes verna is flowering shyly, and well is the name of Blue-eyed Mary merited by this charming plant, which loves a rich, moist soil in partial shade. The small, double-flowered mauve periwinkle is out, and so is the largeflowered variegated periwinkle. Some handsome clumps of pulmonaria, the old Joseph's coat of many colours, are fully out ; the new deep blue is very attractive, so is the dark red, and there is a dwarf white one, but the old favourite, with blue, pink, and red flowers, has such handsome silver mottled leaves, that it still retains a place in my garden. And Lenten roses are blooming well ; but, except some rock plants such as aubrietia and arabis, and early bulbs, such as the pale blue and white chionodoxa, crocus, and many daffodils, nothing much is disposed to venture forth till May.

But if some sheltered paths cut in a shrubbery be given up for spring borders, protected by

Wallflowers and Narcissi - Hurst Court.
shrubs and trees from north and east winds, a very successful garden might be planned.

The herbaceous border proper is in too open a situation as a rule for this, and therefore a special nook must be selected.

A background of mahonia (berberis) has fine, red-tinted leaves at this time of the year, and large clusters of pale yellow flower-heads; and another shrub in full flower is Forsythia, with drooping, graceful stems, leafless at present, but with large, jasmine-like yellow flowers. Ribes, the flowering currant, in red and creamy pink, is also out in the shrubbery, and makes a pleasing picture with red and white daisies in the foreground. Two of the new miniature daisies, Dresden China, a crimson one, and Alice, a salmon pink, are flowering bravely. Primroses can be had in every shade. There are the dark blue Wilson primroses with their lighter varieties, and which look well with the light blue and white chionodoxas pushing through them; there are purple and mauve and pink, and a red with a large yellow eye that looks scarlet in the distance. There is this year, in my garden, a red primrose with a white edge that is new to me ; and there are white primroses, double and single, and double mauves, and all the host of bunch primroses or polyanthus.

These have been in flower all the winter, as it has been so mild, and are full of blossom in white, yellow, and orange ; while the polyanthus are in crimson and reds, and gold-laced browns, etc. Sloping banks of violets and beds of such kinds as Californica are flowering, Admiral Avellan, perpetual blooming crimson-purple; Princess of Wales, longstalked, purple ; and Wellsiana, another good winter flowering and hardy kind. Then there are the small sweet violets, white, red, and blue, which flower here under deciduous trees in masses even among the grass; and there is the yellow violet (sulphurea) which likes stones or mortar-rubble and will seed itself anywhere. This last is almost the colour of an Allan Richardson rose, but is small, like the wild sweet violets. They are all out in early March, and the double violets come on a little later, if under the shelter of shrubs. Aconites in the grass; Iris stylosa at the foot of a wall ; Iris reticulata, all flower in very early spring.

The spurge or euphorbia in different varieties is very early; the native greenish-yellow plant is out at the end of February; Wulfi and the bright yellow polychroma flowering early in April. The dog's-tooth violet, or erythronium, with mauve or maize-coloured flowers, prefers
a shady spot, and flowers in March and April. Leucojum vernum shows its white and green blossoms from February to April and likes moist, cool shade. Erica carnea, though not herbaceous, is so lovely in the spring, with pale pink flowers from February to May, that it cannot be omitted, and looks very well with snowdrops growing through it. Snowdrops will be a lovely addition to a slightly shaded spring garden, and the different varieties will flower in succession from January to the end of March, beginning with nivalis and its newer forms Elwesii and Fosteri, both very large flowering kinds, and plicatus, the largest and latest of all. In naturalising snowdrops here I have found that those sent up from Wales, where they grow wild, have spread to a far greater extent than those of all kinds bought from the usual trade sources and planted in the same wild garden twelve years ago.

The double pale mauve periwinkles, with very small leaves and flowers like a Parma violet, have established themselves in this spring wild garden till they might almost be called wild. There is also another variety growing there which is rather later, flowering at the end of March with small white single flowers and golden leaves, and these make a better carpet
plant than the large-leaved, large-flowered pale blue, or its variegated form, with white and green leaves. It makes a pretty carpet for a little-known bulb called Ornithogalum nutans, with grey and white flowers, striped with green at the back, growing a foot high, which will thrive even in dense shade. This must not be confused with the old Star of Bethlehem, Ornithogalum umbellatum, which is so tiresome to get rid of in a garden, though the flower is rather pleasing when picked.

Daffodils and narcissi are so numerous that they could form a garden by themselves if desired. But if only a very early spring garden is desired, then use the old single wild daffodil for naturalizing in grass or in poor soil, and the old double daffodil for a border of better soil. The latter makes a handsome show when planted in good-sized clumps, and looks better growing among its handsome grey leaves than it does picked for the house. The Tenby daffodil is another early one, as are also some of the Incomparabilis section.

It is not supposed to be possible for the small single wild daffodil to turn into the double form, but, in spite of all the authorities, there is proof of it in a garden near here. The small wild kind was dug out of a wood at a
little distance, where the originals may still be seen, and planted in rows as borders to the kitchen-garden paths. After some ten or fifteen years of good rich heavy soil there are no single daffodils to be seen in the whole garden, except in some grass under trees, where they remain as planted, unaltered in the poor soil. I may add that daffodils were periodically brought in from the wood and planted out in that garden, but everyone has turned double, like the Telemonius variety.

We all know, and the authorities admit that some much improved variety, such as parrot tulips, when left in poor soil for some years, will revert to the wild type; and if they admit that, I cannot see why the reverse process should be scoffed at as beyond the bounds of possibility. Such is the case, however.

Omphalodes verna must be planted in quantity in the spring garden, together with the wild wood anemone, and Anemone blanda and Robinsonii. They are of the loveliest china-blue tints, and should not be planted where the grass is too thick. Anemone sylvestris does not mind where it is planted, and is a most persistent plant, seeding freely everywhere.

Adonis vernalis will flower earlier in the wild garden than in the borders, and so will the
crown imperials, the pale yellow one being especially handsome. If a very moist spot is at hand, plant some of the snake's head fritillaria; they are no good in a border, but in grass, and especially if they can be flooded in the winter, they are delightful flowers, growing 6 inches to a foot high, in curious, spotted-purple colours, and also in white, pale yellow, reddish-brown, and grey and lilac, all spotted. These grow wild in many riverside meadows in Berkshire, and are sold in large bunches in the small shops and in the market at Reading in spring.

For some sheltered nook like this an informal design with winding walks is better than straight paths and formal borders. As a large space is not needed, these winding walks tend to make it seem larger, and give much greater length of edging, which is what is needed for such low-growing plants. Perhaps a bank of earth may be thrown up in one place, and then the corresponding hollow on the other side of the path will not only give variation, but will be useful to grow the moisture-loving species in. The paths should not be of grass, which is wet and slippery in early spring, but should be of some firm material like gravel or shingle, so as to ensure dry feet, or they could be paved irregu-
larly with flat blocks of stone, Bargate stone being a pleasant brown, and obtained from Godalming, and Yorkshire is a cool grey. These paths should not be too wide nor too neat in outline, and clumps of primroses and other plants of neat habit can be brought forward a little way into the path, so as not to have too regular an edge.

It is pleasant to have a sheltered walk in winter and early spring, and for this reason also the paths may be encouraged to wind about, so as to get a longer walk.

Making a good path is not the easy matter it looks. It is not a question of simply laying down gravel flat on to your soil, but a welldrained foundation has to be made. First of all, the soil needs to be taken out or turf removed to a depth of 6 or 9 inches, then a layer of old rubble or clinker or brick-kiln rubbish should be put down from 4 to 7 inches deep. On the top of this put a layer of gravel screenings i inch thick, and roll well. This path will last in good condition for many years; and if chalk is at hand, the lower foundation may be of chalk with 2 or 3 inches of gravel on the top, well rolled in. If made in this way, especially if sloped imperceptibly to the sides, no moss or damp should appear.

And if weeds or grass come, a little weedkiller, applied with care, so as not to injure anything growing at the sides, will soon remove them.

Gravel paths may be made in this way for much wider walks. Stone-paved paths for the spring garden do not need setting in; simply cut out the turf to the shape of the stones and sink them in, or lay them on the surface of the turf, cutting away or filling up here and there to get a trim, level base. Stone paving for the garden needs to be set with a little mortar or cement if the stones are irregular and "crazy patchwork" paths are to be made. Where large oblong or square paving stones are used, this is not necessary, as most people prefer to plant tiny sedums and thyme in between. If this is not done, however, it is better to use some hard cement, otherwise grass and dandelions and similar abominations will take possession, and are most difficult to eradicate and very unsightly. Musk may be sown with advantage between the stones, and will come up year after year, seeding itself, as in the paved walk at Bramshill.

To make grass paths, the same method may be practised ; namely, to take out soil 6 inches

To face page 188.


Border at "Blazes."
in depth and fill in with a good layer of coarse rubble, etc., 3 inches deep, then a layer of ashes, and then the turf. It is not necessary for grass paths to have the parts slightly convex, as suggested for gravel, for the rain has to soak through the grass, while it should run off the gravel.

If space is an object, the same garden can be used for late autumn as well as for early spring, the tall-growing perennials such as Michaelmas daisies and Golden Rod being very much at home in a wood or among shrubs. Indeed, the support afforded them by the shrubs makes all staking superfluous, and the growth is more natural in consequence. If this system is followed, it means that heavy mulching with leaf-mould and manure must be done early in February in order that the spring-flowering shrubs shall not suffer.

Autumn crocus, especially the pale blue; and colchicums, with not only the common kind and the large-flowered rosy one, but also the beautiful double mauve and its rare white form, should be planted in quantity among the spring-flowering plants, as also Sternbergia lutea, the yellow, crocus-like flower supposed to be the "lily of the field," and growing everywhere in Palestine. It likes a dry,
sunny place, and a limestone or chalky soil for choice, though it will do in almost any soil if well drained, and flowers in September and October at the same time as Cyclamen europaum, with its mass of green and silver leaves and hundreds of rose-coloured and lilac flowers, some few inches high, which succeed admirably planted below the stems of beech trees, the smooth grey bark showing them off to perfection.

Helianthus of all sorts and even harpalium may be planted here, where they may take up room unchidden, and their brilliant yellow flowers will light up the whole garden. Golden Rod with feathery plumes may be planted in quantity, and will grow 5 feet high. Even when the flowers are over, the grey feathery heads of seed are beautiful. Liatris, the Blazing Star or Kansas Gay Feather of America, is a bright, rosy purple flower for September, and one of the polygonums, $P$. amplexicaule oxphyllum, has sweet-scented and beautiful flowers growing in heads of myriads of tiny blossoms, flowering from August to October, and is most ornamental, with its handsome habit of growth and branching reddish stems and pointed leaves.

Heleniums, both striata, the copper-coloured,
and superbum, the light yellow, do well in partial shade and are very gay ; while the tall, late-flowering white daisy, Pyrethrum uliginosum, is most graceful with its pale green leaves and rather long fragile petals, and much appreciates shelter from rough wind and rain when in bloom. Another late-flowering plant, enjoying a cool root-run and to be undisturbed, is Anemone japonica, in white and rose. No clumps of this plant in a border ever give the effect that a long stretch planted in partial shade in some wild garden does, and it will flower until the frosts come. Monkshood or aconitum gives a note of blue useful at this time of year, both in navy blue as well as light blue and white. It also enjoys a partially shaded place and a cool soil.

Should a real blaze of colour be desired for October, try to get a background of maple trees, the common pale, yellow-leaved kind, which make such rich splashes of colour in our hedges, as well as some of the American sugar maples, which turn scarlet and flame colour. Also some sumachs, both the fernleaved, well-known sort, and the less wellknown Rhus cotinoides; the first one turning bright red, and the second with colouring too vivid for words, and not to be mistaken for

Rhus cotinus, with its seaweed-like inflorescence and purplish leaves. A few scarlet oaks cut down in spring each year will give you spikes of crimson leaves to grow in your middle row, and Berberis thunbergii, a branching shrub of great beauty with intense scarlet leaves in autumn for your foreground. In and out of your back middle row have Golden Rod and the yellow flowers mentioned before, and in your front row have masses of early chrysanthemums in vivid yellow, bronze, orange, and crimson. The golden glory of autumn will indeed be manifested in such a planting, whether in a border in a garden, or in some wood or wild garden where the direct rays of the sun can reach it.

Golden elder and golden privet are equally good to help out this scheme of gorgeousness, the golden elder when well coloured making the most lovely background for hydrangeas in that particular shade of vivid blue found in Wales and Cornwall.


## CHAPTER XIII

## MY HERBACEOUS GARDEN

What an ugly name! But would "My Perennial Garden," even if correct, sound any better, or "My Hardy Plant Garden"? So I must just leave it. It was originally the kitchen garden, but as it is close to the house and bordering the drive, the vegetables have been banished and only the fruit-trees retained on high walls, many centuries old, which enclose the oblong garden, of half an acre, on three sides. The fourth has a low terrace, with a high yew hedge behind it, and tea roses and yellow jasmine are planted alternately against the wall ; while in the narrow border at its foot are Madonna lilies, their heads rising well above it, and their roots carpeted with Iceland poppies.

The main walk which crosses the garden at the south end is paved with brick, and has solid posts at intervals along it on both sides, with clematis and roses on each, and a rope 193
across to support the hanging masses of purple

and pink blossoms. The other paths are grass, as was originally the main path, but there was
too much traffic there, and after a year or two grass was replaced by the bricks, which are bordered on one side with an edging of "Mrs Sinkins" pinks, and on the other by purple pansies and light blue nemophila. These two, planted alternately, are in bloom all spring and summer. The pansy, a very hardy, fine, and richly coloured tufted "self," was given me some years ago by a Welsh stationmaster who heard me admire it and sent me some cuttings. The nemophila is sown in September and pricked out into position in March, from the seed-bed. Behind these again are some of the newer dwarf roses, and at the foot of the peach and apricot trees against the south wall are clumps of Iris stylosa. This lovely mauve flower, looking like a Cattleya orchid, is very capricious. In some soils it takes six years before it flowers, while in a hard, gritty border with chalk and mortarrubble, and growing in among the roots of everlasting peas and roses, it flowers in quantity from December to March. Belladonna lilies are also at the foot of the wall. They want a richer soil and plenty of sun, and take time to establish before flowering.

The border at the foot of the wall facing east is edged with white pinks and has
quantities of violets planted on it, both Princess of Wales and Admiral Avellan, the hardy crimson-purple kind. At the sunny end are beds of autumn-sown annuals, such as nemophila, Iceland poppies, and larkspurs, which are thinned out to plant elsewhere in the spring, and the rest left for cutting. A large white jasmine and a blue shrubby clematis are on each side of the door leading into the kitchen garden beyond. At the further and shady end of the east border are beds of lily of the valley, the variety Fortin's Giant being particularly fine. These should be planted in early spring, not autumn, and should have waterings of some stimulant in June or a mulching.

The border to the north wall, on which are Cordon gooseberries and Morella cherries, has some clumps of Iris fotidissima grown for the sake of its handsome foliage and its orange seeds, as winter decoration, and large clumps of Spiraa Lindleyana.

Most of the borders are edged with stones, over which grow saxifrage or pinks. They keep things tidier and do not show, and in summer afford a cool shelter for the little fibrous roots which hide underneath them. The centre of this walled garden has a wide
border to it, and beyond a hedge of roses grown on pillars of oak and tied out to wires between the posts-rambling roses of all kinds, from the crimson Excelsa, the cherry-coloured Lady Gay, and the scarlet Hiawatha to various white hybrids. Inside this hedge, which screens the entire centre from observation, and round the four sides are grass paths with borders of different flowers. All the paths converge in a round plot in the centre, and the crossway grass walk is sheltered with vines and honeysuckle on posts and chains, Vitis coignetice from Japan, Vitis heterophylla with turquoise blue berries and others, and the borders underneath thickly planted with white lilies, carpeted yearly with different annuals.

This vine walk and the round plat in the centre is backed by a hedge of Thuja, or Arbor vita, kept clipped, and has two juniper trees of pyramidal shape standing as sentinels at the entrance. The border to the grass plat in front of the Thuja hedge is broken up into eight small beds, where the paths converge. These are filled with lavender and the new polyantha Orleans, an ever-blooming, lowgrowing, bright pink rose ; while behind the hedges are old standard roses of the white Madame A. Carrière (the long growth pegged
down to form a kind of hedge), together with Zephirin Drouhin, fragrant, cherry-coloured, and thornless.

Of the outer borders the one facing the low terrace wall is the most important, for it is seen by all who drive up to the house. Therefore, winter and summer, spring and autumn, it has to be catered for. In winter, although no flowers can be had, it is quite pleasing to look upon, for at intervals are planted various bright-looking shrubs or ivies, the latter trained and cut into tall pyramidal shapes, silver euonymus, gold and silver ivies, golden yew, Cupressus macrocarpa, and Nandina domestica, the Chinese "good luck" tree. Clumps of silver-edged iris (very showy) and yuccas, round bushes of lavender, both small and large varieties, and kept clipped after flowering, and one or two shrubby veronicas keep the border green and furnished until the spring, when daffodils and yellow tulips push through a carpet of forget-me-nots, and a few handsome clumps of doronicum show up well among the small shrubs. This year the border is edged with salmon-coloured sweet-williams, grown from seed, which, with white lilies, and the early Dawson rose on the wire fence at the back, will keep it going until July,
when masses of perennials, in all shades of yellow, brown, and orange, flower, and together with a few bold clumps of Gladiolus Brenchlyensis, alternating with white Hyacinthus candicans, will present a mass of colour lasting till October. As the sweet-williams fade they will be taken up and replaced with annuals, Tagetes, and Coriopsis (sown in boxes), and by some groups of summer chrysanthemums in brown, orange, and yellow shades.

The outer border facing west is edged with the white-flowered saxifrage, through which will come up quantities of double white narcissus and English iris. Behind it a line of pæonies runs the whole length of the garden, whose buds are well protected from the early-morning sun by the rose trellis, while behind them again are the newer Michaelmas daisies or asters. Each clump of the last is pulled apart in October and each piece planted separately, some ro inches apart, forming a clump of five or six pieces. When well staked out, they ought to feather over the border, hiding the pæony leaves, by that time brown and discoloured, and always with the background of the roses on their wire trellis.

On each side of the grass walk in the


## $50 \times 12$, <br> Border in my own garden in mauve, pink, crimson, scarlet, purple, orange, and a few yellow flowers.

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| florim $\begin{aligned} & \text { Mayosorrs } \\ & \text { Pastris }\end{aligned}$ |  |  |  |  |
| Campanulo | Convdvulus Minor Iris MameCheravu Nemophila Sedum Specrabile Mmagalis Grandich Bura Myosotis Nemesia Coerulea |  |  |  |
|  |  |  |  |  |

Border in my own garden in blue, white, and primrose flowers. $50 \times 12$.
middle of the enclosure of roses are 12 feet wide herbaceous borders 60 feet long.

The one on the left is planted entirely with blue flowers in all shades, and with cream, primrose, and white. Blue is very difficult to manage with other colours, but looks delightful if you get a vivid cobalt against a pure primrose, such as Delphinium Persimmon, with the yellow tree lupin, or the azure Nemesia and milk-white foxglove. At the further end it changes from the vivid and strong colourings of anchusa, larkspurs, and commelinas, and with good masses of such plants as white phlox and creamy bergamot, merges into the grey hues of echinops, eryngiums, campanulas, and scabious.

The border is slightly raised, with a stone edging, and here gentians, Plumbago Larpente, Omphalodes verna, Asperula tinctoria, white pinks, and other low-growing things are quite happy in the front row, the lovely tiny blue sedum being sown among them yearly.

The right-hand border shades from the greys and mauves of nepeta (catmint), lupins, and galega, and the pinks of pimpernel, sidalcea, phlox (Mrs Oliver), up to the crimson of spiræa and bergamot, the purple of Salvia
nemorosa and phlox (Mahdi), and then to a vivid climax of scarlet geum (Mrs Bradshaw), scarlet lychnis, phlox Coquelicot and tritomas, broken here and there with the greys of santolina and Gypsophila paniculata, and such low-growing plants for edging as London Pride, pink daisies, campanulas, and pinks (gloriosa). A great effort has been made to prevent any spotty effect, and I have tried to get one mass of a given plant rather than half a dozen clumps at intervals. It will be noted from the accompanying plan that each planting has been carefully chosen with due relation to the colour and height of its neighbour. In spite, however, of all the care that can be exercised in planting, it is generally necessary to alter the position of some of the plants after the general effect has been produced at flowering time, and careful notes should be made for the alterations required, which should be carried out in autumn.

It may be remarked that very little, if any, space has been left for annuals in either of these borders. That is because they are not very large, and owing to the generosity of friends and the acquisitive habit of the owner during twelve years, they are rather crowded as it is. The daisies and London Pride may

perhaps be moved after their flowering is over and their place taken by some annual, but annuals are grown here separately in some of the other borders in the enclosed part. The two borders on the other side of the "rond point" are 52 feet by 12 feet, and where they border the centre grass path are filled for half their width with some of the best phloxes, chiefly in pink, rose, mauve, and purple tones, and as this end is partly shaded and rather moist, it is an ideal place for them. In front of them are single pyrethrum, in pink, white, and vivid crimson colours. They are carefully staked and tied as they grow, or they will get draggled and done for with the first wet wind. A couple of clumps of that lovely mauve Michaelmas daisy, Top Sawyer, which though old and cheap is still one of the best, some feathery pink Cosmos (sown early under glass and planted out), and an undergrowth of mauve candytuft made a charming effect. The phloxes are chiefly Mrs Oliver (low-growing pink), Mahdi (purple), a few tall rose and white ones, Gruppen Königen and Dr Charcot. The back of this border is arranged to face west, and is of campanulas in all varieties with tall clumps of mauve Salvia Sclarea. This has flowers of pale blue, and bracts of
rosy pink, but the effect is mauve, and it grows 5 to 6 feet high. It is not well known in England, though a very old plant; once known as clary, and used by cottagers for making wine. The variety I grow is far better than the one usually seen, and the original seed of it was picked in the garden of the Vatican. It is perfectly hardy, but except in mild winters only a biennial, and is grown from seed.

The back border on the other side of the phloxes (which faces west) is planted with China roses, chiefly Comtesse du Cayla and a few white Irene Watts and red Fellenberg. Between these roses are iris of all kinds, flowering at different times, flavescens, dalmatica, florentina, and the old purple flag. Here there is an undergrowth of Commelina colestis, whose vivid blue blossoms each last but a day. ${ }^{1}$ It is grown from seed, flowering freely the first year if sown in heat, and its tuberous roots remain and go on flowering for years if the soil is not too damp.

On the far side and facing west is a border

[^1]filled last summer with perennials, either on probation or growing on, so as to divide into three or four times as many in the autumn, ready for the herbaceous border. These included such good things as the Bradshaw geums, some new Michaelmas daisies, double rockets, which, alas! flowered themselves to death, and though cut down directly never recovered. Probably a hedge of pink mallows will follow them this summer, or perhaps Campanula pyramidalis preceded by Canterbury bells, both of which are in the nursery borders ready to move on.

These are the chief borders, but there are many other narrower ones. A west border, planted with Belladonna seedling delphiniums and Shirley poppies, was very pleasing last summer. Another is filled with Acanthus mollis, with 5 -foot spikes of purplish flowers, its handsome cut-leaved foliage standing out well from a groundwork of saxifrage, Megasea cordifolia, and Sedum spectabile, that flower beloved of the Red Admiral butterfly. It may not be generally known that the blue thistle, Echinops euthenicus, attracts queen wasps in numbers during August and September, and is a happy hunting-ground for the destroyer.

Other borders are used for growing flowers
for cutting, mignonette, rosy larkspur, snapdragons, scabious, Aster sinensis, and stocks, and in a sunny corner is a mass of Valerian, red, pink, and white. In the middle of the garden grow a tall almond tree and a peach tree, left there for the sake of their lovely blossom in spring. There is also a pear tree with a rose, Paul's single white, growing up it. Single hollyhocks in lemon, white, and pale pink seed themselves and come up sometimes most happily in unexpected places.

To protect the peach and apricot trees that are on the wall against early frost, iron rods, turned up at the end, after the fashion of the garden at Bagatelle, are driven into the wall near the top and project 18 inches or 2 feet. Small thatched hurdles, as wide as the rods are long (or light frames covered with oiled paper would do), are laid upon and secured to these, being partly held in place by the turned-up end of the projecting rod. Old fish-nets can be fastened to them to hang down as a protection if the small hurdles cannot be obtained, but in most districts wattle hurdles can be made in any size required. At one time I had some small frames thatched with straw which answered the purpose admirably, and never before or since have we had such wall

fruit. Unfortunately, an enterprising person connected with the farm discovered that they made capital wind-screens for early lambs, since when they have never been seen again, and are popularly supposed to have been eaten by hungry sheep.

One year I had some 12 -foot borders in which were many late-flowering perennials of the sunflower, late white daisy, and starwort families, filled up with hundreds of plants of Canterbury bells.

The picture made by the varying shades of mauve, purple, pink, and white was set off by some very large bushes or pillars of an oldfashioned rose called Cheshunt hybrid, one that is seldom ordered now, as it only flowers once in the season. Its big, heavy heads, crimson when freshly opened, changing and paling to veritable vieux rose and lighter faded tints, were extraordinarily attractive with the Canterbury bells beneath, and when their beauty was over they were replaced by summer chrysanthemums, such as Perle Chatillonaise, creamy yellow; Rabbie Burns, salmon and yellow ; Horace Martin, vivid yellow ; and Tonkin, mandarin yellow ; which range of colourings worked in very well with the heleniums and helianthus behind.

Another year this border was given up to eremuri in all its varieties of pink, peach, lemon, cream and white, rising from a groundwork of Alstrcmeria chilense in its gorgeous azalea-like colourings.

For two or three years the warmest border, which is slightly on a slope, was given up to carnations. Six hundred plants were grown in four varieties only, of the hardiest and most profuse flowerers, namely, Audrey Campbell, pale yellow; George Maquay, white ; Raby Castle, pink ; and a scarlet seedling. This bed was filled with bloom for two months; indeed, Audrey Campbell flowered right through the summer and into November, and armfuls of grey-green and white loveliness were cut from George Maquay, which grows so luxuriantly that it was never necessary to see if any buds were cut by mistake.

Raby Castle has the bad fault of splitting, worse in some gardens than others, and is being replaced by such new sorts as Mrs Nicholson and Adeline.

We used a great deal of cow manure as a subsoil, and the ground, before planting, was well pressed down by means of a plank with a good big gardener to stand on it. The plank was used for kneeling on, and was gradually
moved backwards as each row was planted in turn with rooted cuttings in October and early November.

Alas ! a day came when we were persuaded to leave the layers where they were, without transplanting, instead of remaking the border. The next summer was a wet one, and owing to overcrowding they all died out.

This year a batch of the perpetual carnations from the greenhouse are to be planted out. If they are young plants, and not too leggy when put out in April (to make room for the Malmaisons), they give blossoms without stint, and owing to their upright habit of growth do not require so much staking as the border carnations. Britannia, a large scarlet with very strong foliage, did splendidly out of doors last summer. Planted out from flowering pots into a very large stone trough and left to tumble over naturally, they flowered in a sheltered corner till nearly Christmas. In Spain, the home of the carnation, they are grown in pots hung up on the sides of the houses, when they fall over like a cascade of grey with flowers of the most lovely tints.

This year, in addition to Britannia, we shall plant out May Day, a bright and hardy pink, Enchantress, the well-known flesh-coloured
form, and white Lawson, all free-blooming and sturdy. In addition to these, we shall have a bed of the old crimson clove (brought from the Isle of Wight). Year after year we have tried to grow this old favourite, and each time the blooms open with ugly splashes of white, however true the stock may have been. It is a mercy that "hope springs eternal" in the gardener's breast.

A word or two as to the clematis growing on the various poles in this garden, which, by the way, is quite apart from the gardens on to which the house opens. Several curious kinds which I could never get named flourished here, and had evidently been here for many years. One has unfortunately died after a very severe cutting back. It is a mistake to cut a very old clematis back to the ground, even if the stem be ugly and ragged. They rarely survive such drastic treatment, and I have lost two or three this way.

One of these clematis had a most lovely fern-like leaf, finely cut, delicate and graceful, of vivid light green, and with slightly drooping bells of peach colour, a good deal larger than those of the old purple viticella. Another was also of peach colour, shaped like Jackmanii but much smaller, with a bar down the centre of
each petal of rather a rough purple-blue. One of this variety still lives, but I have never seen anything that resembles it at any of the shows or nurseries.

Another very old plant in this garden was a pink rose very full and very fragrant, flowering in September as freely as it does in June, and looking from the size of the stem as if it lived here for centuries. And it very likely had, for it is the counterpart of the one mentioned in another chapter as having been painted by Van Verendael in 1628.

Owing to an alteration which necessitated pulling down the wall behind it, we had to do away with the old plant, but were fortunate enough to get some plants from cuttings. The flowers are very large, one bloom was measured and found to be 4 inches across.

Among the bulbs that take care of themselves in this garden are the colchicums, which no amount of digging ever seems to disturb, and which throw up their great chalice-shaped cups of rosy mauve when most needed, namely, in October.

The great tulip family will not establish themselves permanently, with the exception of the rose-coloured Gesner tulip, an old favourite, which flowers yearly in masses, and
a black Darwin tulip of which a clump or two are always to be found in May ; all the others, though planted by hundreds in different years, have died out. Triteleia, a small and pretty white-flowered bulb, seems to be able to take care of itself ; but in this hot gravel soil no lily but candidum is ever permanent, though speciosum does well in another part of the garden. Neither alstrœmeria nor the delightful red October flowering African bulb schizostylis succeed here for long. While in Ireland's moist deep soil the latter flourishes, here plants even from the same source die out. Lilies of the valley do extremely well, perhaps because they are given a damp place at the foot of a north wall, and the large variety (Fortin's Giant) is always particularly fine.

This oblong garden filled with flowers may serve as a guide to those who have one of the same shape, possibly their only garden; and if one or two of the flower borders were replaced by flowering shrubs, a very representative and certainly a very charming garden might be made even near or in a town.

It needs a shallow marble basin and lead figure in the centre, or a sundial, or even a little brick-edged pond ; but at present all this is supplied only by that vivid imagination I
have alluded to before. It also cries out for a couple of Elizabethan brick seats, in keeping with the period of the walls. The colour of the bricks has much to do with the charm of this garden ; they are of a delicate pink, flushed here and there with warmer sunny tones of red, and occasionally melting into lilac, and they make a wonderful picture when the peach and almond blossom are out.

## .

PART II

# ALPHABETICAL LIST OF PLANTS SUITABLE FOR GROWING IN HERBACEOUS BORDERS 

ACHILLEA, "Yarrow." (N.O. Compositæ.)

Useful border plants for hot, dry soil, propagated by seed or division, requiring room for root-run.
A. alpina. White, 2 feet high, flowering June to September.
A. artiplex, Hortensis rubra (spinach plant). See Annuals.
$A$ aurea. Yellow, 18 inches, requiring rather a warm place.
A. Eupatorium (also called A. filipendula). 3 to 5 feet high. Flowers July to October. Yellow flowers in flat heavy heads. Ordinary soil. Showy, and suitable for large borders or wild gardens; any aspect.
A. Herten. White flowers, silvery-grey foliage, 6 inches high. Flowering in May and June.
A. Millefolium (Crimson Queen). A variety of recent introduction from the common yarrow. It flowers in June. Flat, heavy heads. Cerise. Any soil or aspect. 2 feet high.
A. Ptarmica, The Pearl (Sneezewort). Native plant, 2 feet high, flowering July to September; numerous heads of small, fluffy white flowers. A most useful plant for borders or cutting, lasting long in water and very decorative. A very frce grower. Any soil or aspect. Needs dividing every two years.

ACONITUM, "Monkshood." (N.O. Ranunculaceæ.)
Tall-growing useful perennials. Late summer and autumn, in colours rare at the time, namely, light and dark blue. All propagated by division in spring, or seed. Flowering August to November and liking light soil. They do not object to partial shade.
A. autumnale. Blue, 3 to 4 feet, flowering August to November.
A. chinense. Large violet flowers, very handsome.
A. Fischeri. Clear blue, 3 feet high, September and October.
A. Lycoctonum: Pale yellow, 3 feet, flowering July and Aug.
A. Napellus. Dark blue, white and parti-coloured; 4 feet; June to September.
A. volubile. Violet, climbing ; 8 feet; September to October.
A. Wilsonii. Pale blue, 6 feet ; September to October.

ADONIS, "Pheasant's Eye." (Ranunculaceæ.)
Pretty spring flowers with light green feathery foliage, requiring deep gritty light soil and full sun. Propagated by division in late summer, or by seed sown in pans in a cold frame.
A. amurensis. Yellow, 1 foot high, flowering February and March, with a double-flowered variety.
A. vernalis. Light yellow flowers, March and April. These plants do not like root disturbance.

AGAPANTHUS UMBELLATUS, "Moore's African Lily." (Liliaceæ.)
A bulbous plant, hardy in light porous soils or in raised borders, flowering in August. Blue-violet flowers; 2 to 3 feet; propagated by division in spring.

AGROSTEMMA, "Rose Campion." (N.O. Caryọphillaceæ.)
Easily grown and free-flowering plant with greyish-white foliage; flowers white, rose, and crimson; 2 feet high; flowers from June to September. Will flourish in any soil or situation, and is increased by division of the roots or from seed.
A. coronaria. Crimson flowers.
A. Flos-Jovis. White, pink, and crimson.

AJUGA, "Bugle Flower." (N.O. Labiatæ.)
Dwarf plants suitable for carpeting. Will grow anywhere, but prefer moist positions. Propagated by division.
A. genevensis. Blue, rose, and white, with shiny green leaves; flowers in May.
A. metallica crispa. Deep blue flowers, crinkled foliage; flowers in July and September.
A. reptans. Blue, flowers in May.
" variegata.
ALLIUM, "Siberian Garlic." (N.O. Liliaceæ.)
Bulbous plants liking light porous soil and not objecting to shade. Loam and leaf-soil suits them well.
A. coruleum. Blue, I to $\mathrm{I} \frac{1}{2}$ feet high, flowering June and July, propagated by offsets or seed sown in spring.
A. Moly. Bright yellow, 12 inches high, flowering in June and July, propagated by offsets and seed.

ALSTRGEMERIA, "Peruvian Lily." (N.O. Amaryllidaceæ.)
Lily-like plants, liking deep rich soil and full sun, when they require no further attention and will increase rapidly. Increased by division or seeds, afterwards to be planted out in a mixture of peat, leaf-mould, and sandy soil.
A. aurantiaca. Orange, 3 feet, flowers July to August.
A.chilensis. Orange, scarlet and pink shades, 3 feet high, flowers July to September.

ANCHUSA, "Alkanet" or "Bugloss." (N.O. Boraginaceæ.)
Tall-growing plants which are not particular as to soil or situation. They can be propagated by root cuttings in spring, pieces 2 and 3 inches long, being planted in boxes of sandy soil in a greenhouse or out of doors on a warm border. Old plants are very liable to die out after flowering. The varieties will come fairly true from seed. The genus includes some thirty species from Europe, Africa, and Western Asia. They commence to flower in May, and go on through the summer.
A. Barrelieri (Myosotis obtusa). Native of S. Europe. Blue flowers with yellow throat.
A.capensis. Biennial, not quite hardy; blue flowers with white tube.
A. italica (Azurea).

Dropmore variety, brilliant blue, 4 feet high, flowers June to September.
Opal variety, pale blue, 4 feet high, flowers June to Sept.
A. mysotidiflora (A. macrophylla). Siberian, fine blue flowers and yellow throat.
A. officinalis. Native plant with pinkish-blue flowers.
A. " incarnata. Pink.
A. sempervirens. Native plant, forget-me-not-like flowers, luxuriant growth ; 2 feet; good spring plant.
A. tinctoria. S. France, blue and purple flowers, root yielding a red dye.

ANEMONE, "Windflower," Japanese Variety. (N.O. Ranunculaceæ.)

Handsome autumnal plants growing in any soil or aspect, but resenting disturbance ; flowers August to October. Increased by division in spring or from seed.
A. Alice. Large rose flowers.
A. apennina, blanda, Robinsonii. All pale blue species, admirable for growing in grass, and increased by division or seed.
A. coronaria and $A$. fulgens. More suitable for borders. In all colours, single and double, and best propagated by seed sown as soon as ripe very thinly. In rich deep soil anemones will freely increase and seed themselves.
A. Géant des Blanches. Large white.
A. Kriemhilde. Semi-double crimson, large flowers.
A. Lady Ardilaun. Large white flowers.
A. Lord Ardilaun. Semi-double white flowers.
A. Queen Charlotte. Pale pink large flowers.
A. Whirlwind. Semi-double pure white.

ANTHEMIS, "Camomile." (N.O. Compositæ.)
Useful plant for hot, dry soil and sunny situation. Free-flowering, growing in handsome masses, 18 inches to 2 feet high. Flowers June to October. Increased by division cuttings.
A. Kelwayi. Bright yellow.
A. tinctoria. E. C. Buxton. Lemon-yellow.
A. Triumfetti. Deep yellow.

## ANTHERICUM, "Lily Wort." (N.O. Liliaceæ.)

Bulbous plant with fleshy roots. Easily grown, preferring moist, deep soils, from 18 inches to 2 feet high, increased by division of the roots in autumn.
A. Liliago (St Bernard's Lily). White, graceful spikes, 2 feet high ; flowers June and July.
A. Liliastrum (St. Bruno's Lily). Spikes of lily-white-like blossom flowering in early summer. Preferring a free, sandy soil. Should be mulched with rotten manure.

ANTIRRHINUM, "Snapdragon." (N.O. Scrophulariaceæ.)
Any soil or aspect. Heights from 9 inches to 3 feet, and in all colours. Propagation by seed or cuttings taken in September. See List of Annuals.

## AQUILEGIA, "Columbine." (N.O. Ranunculaceæ.)

Showy border plants liking moist and sheltered positions and full sun. The coarser varieties do not object to shade. From I to

2 feet high, and in all colours. Very apt to degenerate, requiring constant reselection, owing to chance hybridization by bees and other insects. Propagation by division or seed, which should be procured from a reliable source.
A. carulea hybrida. Twelve to is inches high, blue and white flowers, flowering from April to June. Seeds to be sown annually. The plant often dying out after flowering once.
A. californica. Red and yellow handsome flowers, 2 to 4 feet high, flowering May to September.
A. canadensis. Scarlet and yellow, I foot high, flowering April to June.
A. chrysantha. Yellow, long spurs. May to August.
A. glandulosa. Pale blue and white, I foot high, flowering in spring, liking deep sandy soil ; should be divided when the plant is in full leaf.
A. Skinneri. Greenish-yellow and scarlet flowers, very free, 3 to 4 feet high, fine border variety.
A. Stuartii. China-blue and white, I foot high, flowering in spring ; very lovely, but difficult to grow.
A. vulgaris. White, a native plant, flowers April to July, 2 to 3 feet high.
A. vulgaris hybrida. In all colours, 2 to 3 feet high, flowering April to July, very fine for borders.
A. vulgaris Sylvie. White, 2 to 3 feet high, flowering April to July.

ARABIS, "Rock Cress." (N.O. Cruciferæ.)
Useful edging or carpeting plants, flowering April to June ; propagation by division, cuttings, or seeds.
A. albida. White, 3 inches high.
A. albida flore pleno. Spikes of pure white double flowers, 6 inches high.
A. albida variegata. In both double and single white flowers, green and white foliage.
A. rosea. Pink.

ARMERIA, "Sea Pink" or "Thrift." (N.O. Plumbaginaceæ.)
Pink and red flowers, tufted foliage, suitable for edgings, increases almost too rapidly for borders; propagated by divisions or seeds.
A. latifolia rubra. Deep rich red.
A. maritima. Common pink form.
A. maritima alba major. Large white flowers.

## ARTEMISIA, "Wormwood." (N.O. Compositæ.)

Ornamental greyish-foliaged plants, growing in any soil or situation ; propagated by cuttings or divisions.
A. Abrotanum (Southernwood or Old Man). Strongly-scented foliage, $2 \frac{1}{2}$ feet high.
A. argentea. Silvery-white foliage, a good border plant for a sunny position, 12 to 18 inches high.
A. lactiflora. A stately plant with creamy-white plumes of flowers, very graceful and effective, 4 feet high, and liking rich soil.

ASPERULA, "Woodruff." (N.O. Rubiaceæ.)
Low-growing plants, propagated by division in early summer; any soil or situation.
A. odorata. Sweet-scented white flowers, useful for carpeting in shady places, 3 inches high.
A. tinctoria. White flowers, resembling gypsophila, front row plant, 9 inches high, flowering in June ; propagated by division in spring.

ASTERS, " Michaelmas Daisy" or "Starwort." (N.O. Compositæ.)
These plants, some of the most useful that we have for late summer and autumn, are not particular as to soil or situation. To see them at their best, they should be given rich soil and sunshine, and should be divided annually in autumn or spring into small pieces.
A. acris. Lavender blue, 3 feet high, flowers August and
September.
A. Amellus. Large violet flowers, 2 feet, flowers August to
October.
A. Amellus bessarabicus. Purplish blue, very large, 2 feet,
flowers August to October.
A. " Perry's Favourite. Rose, dwarf-branching, 2 to 3
feet high, fowers August and September.
A. " Riverslea. Dark violet - blue, 2 feet, flowers
September and October.
A. cordifolius albulus. White, 4 feet, August and September.
A. " Diana. Faint lavender, almost white, 4 feet
A. " elegans. Soft lilac, long sprays, 4 feet high,
flowers in September.
A. cordifolius ericoides. Heath-like, foliage turning dark red in late autumn; thick racemes of small white flowers ; 2 feet high ; flowers September and October.
A. "Hon. Edith Gibbs. Pale blue, 4 feet high, flowers September and October.
A. Nova Anglica-

Lil Fardell. Rose-coloured flowers, 4 feet high, flowers September and October.
Mrs J. F. Rayner. Crimson, 4 feet, flowers September and October.
Mrs S. T. Wright. Large-flowered, rosy purple, 5 feet high.
Ryecroft purple. 5 feet high, September and October.
A. Novi Belgii. Beauty of Colzell. Lavender-blue, double flowers, 4 feet high, flowers September and October.
A. ", Climax. Blue-mauve with large gold centre. very large flowers, branching sprays, 5 feet high. Flowers in October. Largest aster yet raised.
A. " Flossy. White, 3 to 4 feet, flowering in August and September.
A. " St. Egzin. Soft pink, a compactly growing and beautiful variety, $2 \frac{1}{2}$ feet high, flowering in September and October.
A. "

Top Sawyer. Pinkish mauve, beautiful old variety, 4 feet high, flowers September.
A. ", Madame Cacheux. Pale pink flowers, bushy habit, I foot high.
A. " Puniceus pulcherrimus. Rosy lilac, yellow centre, 5 feet high, flowers in September.
A. ", Symphony. Quite new, said to be the finest variety yet raised, white shaded mauve.
A. Snowdrift. White flowers, branching habit, 2 feet high, flowering in September.
A. Tradescantii. White, graceful variety, with small flowers and feathery foliage, flowering October to December.
A. turbinellus. Violet, large-flowered and graceful, 4 feet high, flowering in October.
A. " albus. White, long slender stems.
A. vimineus. White, graceful sprays of small flowers, $2 \frac{1}{2}$ feet high, flowering September to November.

## ASTILBE, "Spiræa." (N.O. Saxifragaceæ.)

Strong-growing, handsome plants, suitable for damp places, will succeed in any good borders with rich soil, and they do not mind shade. Propagation by division in spring.
A. Davidii. Large plumes of reddish-purple flowers which grow 6 feet high in a rich, damp soil, $2 \frac{1}{2}$ feet in poor soil.
A. grandis. Companion to the last, but with pure white flowers.
A. Queen Alexandra. Rose-tinted panicles of bloom, 2 feet high.
A. Salmon Queen. Bright salmon-pink, free branching, 3 to 4 feet high.
A. Silver Sheath. White flowers in tall feathery spikes.
A. ulmaria (Meadow-sweet). Tall native plant.

ASTRANTIA, " Masterwort." (N.O. Umbelliferæ.)
Erect habit and branching stems, pinkish green flowers, preferring damp and shady situations; flowering in May and June.
A. major. Pink.
A. rubra. Darker pink.

AUBRIETIA, "Rock Cress." (N.O. Cruciferæ.)
For walls, pavements, carpeting, or borders. A valuable plant, forming masses of lovely colour, 4 to 6 inches high, flowering from March to June, and preferring a sunny place, with lime or old rubble added to the soil. Propagation by cuttings taken in May, by seed sown the year before, or by layering the old plants after flowering.
A. Bridesmaid. Pale pink.
A. Dr Mules. Bright dark purple.
A. Fire King. Crimson-purple
A. Lavender. Large flower, blue-mauve.
A. Lloyd Edrwards. Large, rich violet, one of the best varieties raised.
A. Moerheimii. Pink.
A. Purple Robe. Rich purple.
A. Wallacei. Dark purple-blue, continuous bloomer.

In addition to these, the old variety Graca is a constant bloomer with pale mauve flowers.

BELLIS, "Daisy." (N.O. Compositæ.)
A good edging plant, 3 inches high, requiring rich soil, but succeeding well in the shade. Propagated by division or seed.
B. grandiflora alba. White.
B. " Rosea. Red.

## BOCCONIA, "Plume Poppy." (N.O. Papaveraceæ.)

Tall, handsome plant with deeply cut-out glaucous leaves. This plant requires a great deal of room, but is not particular as to soil or situation. It grows 5 to 8 feet high. Propagated by division in spring.
B. cordata. Plumes of creamy flowers with red-brown stalks and stamens.
B. microcarpa purpurea. Light buff flowers, followed by purplish seed vessels.

BOLTONIA, "False Starwort." (N.O. Compositæ.)
A showy plant in late summer, not unlike a Michaelmas daisy, but with smooth glaucous stems. A good plant for a shady border. Propagated by division in spring.
B. asteroides. Flesh colour, 3 feet high, flowering in August.
B. glastifolia. Pink, 18 inches long, flowering in September.
B. lavigata. Pink, with double flowers, 5 feet high, flowering in August.

BORAGO, "Borage." (N.O. Boraginaceæ.)
Flowers of easy culture, pale blue, and preferring a rich, moist loam, and, with the exception of laxiflora, almost too coarse for a border.
B. laxiflora. Pale blue flowers, 12 inches high, flowering May to August.

## BUPHTHALMUM, "Ox-eye." (N.O. Compositæ.)

A bold and showy perennial not particular as to soil, with large, heart-shaped leaves, and heads of yellow flowers with dark centres. Should be planted in large masses. Division.

CALCEOLARIA. (N.O. Scrophulariaceæ.)
Plants not generally known as hardy, but some recent crosses between the hardy species C. plantaginea and one of the large.
flowered varieties have given us one said to be perfectly hardy, preferring a moist and shady spot. Propagated by cuttings taken in early autumn, planted in sandy soil in a cold frame.
C. Golden Queen. Light yellow, flowering in great abundance, from 2 to 3 feet high, requiring a moist and shaded spot to do it justice.

CALLIRHOË, " Poppy Mallow." (N.O. Malvaceæ.)
Hardy herbaceous plants for the open border, in rich light soil.
C. digitata. Reddish-purple flowers in summer, 3 feet high.
C. macrorrhiza alba. White flowers with red stems, 2 feet high, sometimes mauve and pink. Propagated by seed.

CALTHA, "Marsh Marigolds." (N.O. Ranunculaceæ, King Cup.)
Bright yellow flowers, large, glossy, round leaves; strong-growing plants about a foot high, and succeeding in boggy, moist, or very wet soils, in any aspect. Division after flowering (May and June) is over.
C. leptosepala. White, 6 and 12 inches high.
C. palustris monstrosa plena. Large double yellow, 18 inches high.
C. polypetala. Yellow, 3 feet high. A new and very fine variety.

CAMPANULA, " Bell Flower." (N.O. Campanulaceæ.)
A bell-shaped flower varying from 2 inches to several feet in height, one of our most useful plants for the border, or for cutting, and not particular as to situation or soil. Will thrive in shade. Propagation by division or seed.
C. carpatica. Light blue flowers like harebells, 12 to 15 inches high, flowering in July and August. Can be obtained in white and paler forms.
C. G. F. Wilson. Deep purple-blue, salver-shaped flowers, 4 inches high, flowering June to August.
C. glomerata dahurica. Rich purple, effective in a mass, 18 inches to 2 feet high, flowering May to July.
C. grandis. Large, erect spikes of pale blue flowers, 2 to 3 feet high.
C. lactiflora. Pale mauve, fine border plant, 3 to 5 feet high, with large heads of flowers, June to August.
C. latifolia. Tall spikes of large, drooping bells; blue-mauve.
C. Michauxoides. Pale mauve flowers, greyish foliage, 3 feet high ; requires a sunny spot and rich, light soil.
C. persicifolia alba grandiflora. Immense white bell-shaped flowers, 2 to 3 feet high, flowering in July and August ; also in a double variety.
C. Phyllis Kelway. Pale heliotrope, large and double, $2 \frac{1}{2}$ feet, flowering June to August.
C. pumila or pusilla. Pale blue-mauve. Edging plant 3 inches high, flowering June to September.
C. pumila alba. White, ditto.
C. pyramidalis. Chimney Campanula. Pale blue or white, 4 to 5 feet high, flowering July to September, liking shady position and good soil ; should be treated as a biennial and grown from seed.
C. Trachelium. Single, blue-mauve, 2 feet high.

## CATANANCHE CARULEA, " Blue Cupidone." (N.O. Compositæ.)

An old-fashioned border plant from Italy and south of France, deep blue colour, 2 feet high, not particular as to soil, propagated by seed or division. Also a white variety.

## CENTAUREA, " Knapweed." (N.O. Compositæ.)

Excellent, free-growing plants, not particular as to aspect or soil, though preferring a sandy loam. Propagated by division or seeds.
C. babylonica. Yellow flowers and tall silvery leaves which are the greatest attraction of the plant. Propagated by seed,
C. macrocephala. Bright yellow heads of bloom, very robust, 4 to 5 feet high.
C. montana. Blue like a coarse-growing cornflower, about 2 feet high, with white and rose-coloured varieties also.

## CENTRANTHUS, "Valerian." (N.O. Valerianaceæ.)

Red, pink, and white in dense heads of small flowers, growing about 12 inches high, preferring poor sandy soil, and excellent for dry borders, liking lime or old mortar-rubble.

CERASTIUM, " Mouse-ear Chickweed." (N.O. Caryophyllaceæ.)

A useful carpeting plant with silvery foliage and white flowers. Easily propagated by divisions or cuttings.

CHEIRANTHUS, "Wallflower." (N.O. Cruciferæ.)
beautiful plants generally known only by the single biennials. There are, however, many other varieties in cultivation, which, if given a sunny border, with plenty of mortar-rubble, flower well in winter and early spring. The finest of all the varieties are the old double kinds, double yellow, double purple, double orange, which are propagated by cuttings.
C. calfrinus. Yellow, 9 inches high, flowering April to July; succeeding in shade.
C. longifolius. Pinkish purple flowers and large leaves, April and May, $2 \frac{1}{2}$ to 3 feet high.
C. Menziesii. Purple, May and June.
C. mutabilis. Pale yellow and dull purple flowers in April and May, about 3 feet high.
C. Marshatii. Orange flowers, 9 inches to I foot high, April to July; a fine plant for massing.
C. ochroleucus. Straw-coloured, 9 to 12 inches, flowering April to July.
All the above are propagated by cuttings or by seed, and though their flowering times are said to be as above, they flower here through the late autumn and begin again in March.

CHELONE, "Turtlehead." (Scrophulariaceæ.)
Very handsome herbaceous plants not unlike pentstemons, of easy culture in any garden soil. Propagation by division in August or September, also by seeds and cuttings.
C. barbata (see Pentstemon barbata).
C. Lyoni. Pink flowers, 2 to 3 feet high, flowering from July to September.
C. obliqua. Tall and slender, of a deeper pink than the above, with a white variety.

CHRYSANTHEMUM, "Shasta Daisy." (N.O. Compositæ.)
Showy border plants, useful for cutting or massing. Flower in July and August. 18 inches to 2 feet high. Propagated by division or seed. Any soil or situation.
C. maximum Kenneth. White with laciniated petals.
C. " King Edward VII. Large white flowers.
C. " Mrs C. Lothian Bell. Very large white flowers.
C. " Vomerense. Large white flowers with very small yellow disc.

## ALPHABETICAL LIST OF PLANTS

Chrysanthemums, early flowering kinds:-These are invaluable in September and October for the front row of a border. Many of the older sorts are perfectly hardy, and will stand the winter out of doors, but they are better lifted in autumn, kept in a cold frame all winter, and divided and potted in the spring. Also propagated by cuttings or seed. Among those that are quite safe to leave out of doors is Cottage Pink, an old-fashioned tall variety with pink flowers and bronze-green leaves. The Pompon varieties, which flower in July, are better cut back a little in June to ensure a later flowering. They grow about 18 inches high, while the others are from 2 to 4 feet.

The varieties are so numerous that only a few can be given here.
Carrie. Bright yellow, very free.
Champ d'Or. Bright yellow and very dwarf.
Crimson Marie Masse. Bronze.
Crimson Pride. Deep crimson.
Goacher's Crimson. Large, bright red flowers.
Harvest Home. Brown and yellow.
H. H. Crane. Chestnut petals with gold lining.

Horace Martin. Bright yellow.
Madame C. Desgrange. Creamy white.
Madame M. Masse. Lilac-mauve.
Mrs Burrell. Primrose-yellow.
Perle Chatillonaise. Creamy-white and pink.
Perle Rose. Pearl pink, small round flowers.
Polly. Deep orange.
Rabbie Burns. Salmon-pink.
Sally. Coral-pink.
White Quintus Pure white.
Flora (Pompon). Yellow.
L'ami Conderchet (do.). Creamy-white, orange and brown.
St Crouts (do.). Light pink.

## CIMICIF UGA, " Black Snakeroot." (N.O. Ranunculaceæ.)

Tall handsome plants of easy culture in rich soil. Propagation by division.
C. racemosa. White blossoms in feathery racemes, I to 3 feet long, handsome foliage, growing 6 feet high.

CLEMATIS, "Virgin's Bower." (N.O. Ranunculaceæ.)
This plant, generally known as a climber, has three or four herbaceous varieties, from I to 3 feet high, and though they prefer
a chalky soil and full sun, will grow in any situation. Propagated by division or seed.
C. heraclecefolia azur. Pale blue flowers 2 feet high.
C. davidiana. Pale lavender blue flowers in dense heads, flower in early autumn, 4 feet high.
C. integrifolia. Deep blue flowers, 2 to 3 feet, flowering June to August.
C. recta. White, one of the best of the herbaceous species, growing 3 feet high and sweetly scented, flowering June to August.
C. " grandiflora. An improvement on the type.
C. verticillaris. Violet-blue flowers, sweetly scented, very tall.

## COLCHICUM, "Autumn Crocus" or "Meadow Saffron." (N.O. Liliaceæ.)

Bulbs with flowers like a crocus, but larger. Very useful in borders, as they flower in October and November. The large, lightgreen leaves are handsome, appearing in April and dying down before the flowers show. Propagate from offsets, or seed sown when ripe. Any soil or aspect.
C. autumnale. Lilac or rosy mauve, 4 inches.
C. byzantinum. Pale rose, 4 to 6 inches.
C. speciosum. Giant variety, rosy mauve; also a rare white form.

## COMMELINA CEELESTIS, " Day-flower." (N.O. Commelinaceæ.)

Pure cobalt-blue in colour, 18 inches to 2 feet, grass-green foliage. Well worth growing ; the tuberous roots can be stored like dahlias, and the plants will flower from July to September from seed sown under glass in March. Any soil or aspect.

> CONVALLARIA, "Lily of the Valley." (N.O. Liliaceæ.)

Hardy perennials with deliciously scented flowers, requiring partial shade and moisture. They thoroughly enjoy a wall, and will spread right along the foot of a north or north-east wall where but little thrives as a rule. Good garden soil suits them, but they like a mixture of loam, leaf-mould, sand or grit, and old manure. After flowering they should be watered once a week from June to September with weak manure water, and if this is done they will flourish in rows in full sun. They should be planted in February to ensure success, and may be divided after four years if it is wished
to increase the stock, or pieces here and there may be dug out and the holes filled in with rich soil and decayed manure. The flower stalks should always be cut, not pulled out.
C. majalis. 6 to 12 inches, flowering May and June.
C. " Fortin's variety. A giant form, equally fragrant.
C. " rosea. Rose-coloured variety.

## COREOPSIS. (N.O. Compositæ.)

A valuable plant from North America. Brilliant yellow and handsome, flowers on strong stems 18 inches in length. Lasting well and in flower from August to September. Any soil or situation. Propagated by division or seed.
C. grandiflora and its improved variety Eldorado. Brilliant yellow, flowering all summer.
C. lanceolata. Yellow.
C. palmata. Orange yellow. Erect stems 18 inches high.

## CRINUM CAPENSE, "Cape Lily." (N.O. Amaryllidaceæ.)

Hardy plants from the Cape with long, strap-shaped leaves and umbels of pink and white lily-like flowers on tall stems. Should have a well-drained soil, preferring sandy loam well enriched. Propagate by offsets.
C. Powellii. Very handsome rose-coloured flowers, with a scarce, white variety, not quite hardy, and well worth protection in cold or wet places.

## CROCUS. (N.O. Irideæ.)

Early spring or autumn bulbs in yellow, white, blue, purple, and lilac, the yellow being the earliest. The blue crocus is found wild in parts of England, and there is a tradition that it appears where Danish blood was spilled. Sand and leaf-mould mixed will help them, though even in the worst soil they flourish. Increase by offsets when too thick.

The autumn crocus is very beautiful, and, unlike the colchicum, has not the massive foliage which is so untidy as it dies off, and is very suitable for borders.
C. nudiflorus. Mauve, October.
C. sativus. Violet, September, October; liking warm, dry soil.
C. speciosus. Lilac-purple, handsome autumn-flowering variety.

## CYCLAMEN, "Sowbread." (N.O. Primulaceæ.)

Low-growing tuberous-rooted perennials flowering in early spring and autumn, the marbled grey and green leaves being very attractive, especially in C. neapolitanum. They require perfect drainage and partial shelter, and are gems for the raised stone edge of a border if slightly shaded from hot sun and top-dressed annually with rich compost when leaves are down. Propagated from seed. Self-sown seedlings can be found as a rule.
C. Coum. Rose red, 4 inches high, February to March; also in white, lilac, and crimson.
C. europœum. Crimson, 4 inches; August and October. (Plant deeper than the other varieties.)
C. ibericum. Red, purple, lilac, and white varieties; 3 inches; February and March.
C. latifolium. Purple, autumn flowering.
C. neapolitanum. Light pink, or white; 4 inches; August, September.

## DELPHINIUMS, "Larkspur." (N.O. Ranunculaceæ.)

Perhaps the most valuable herbaceous plant for borders that there is-certainly the most popular. Their form of growth is striking, and their stiff plumes and spikes of flower are in the most intense shades of blue known, as well as in paler blues, red, mauves, purples, sulphur colour, and white. They luxuriate in rich deep loam, moist rather than dry, and do badly in poor dry soils unless copiously supplied with water and manure during their growing season. They need to be divided in spring or autumn if it is desired to increase them. They will accommodate themselves to any aspect, and even thrive in London-flowering in July and August. But should new varieties be desired, seeds may be sown either when ripe in boxes in a cold frame in winter, or in spring in the open air (March and April). A succession of blooms may be obtained by dividing the plants in March, and some of them in April and May, to retard the flowering period.
D. cardinale. Showy species from Canada, scarlet, 3 feet high.
D. nudicaule. Scarlet flowers, 18 inches high.
D. zalil (sulphureum). Pale sulphur-yellow.

Belladonna. Pale sky-blue, 3 feet, a continuous flowerer; July onwards.
Belladonna seedlings. Stronger growers than the above, and of lovely shades of blue.
Cineraria. Bright blue, dwarf variety, 2 feet.

## ALPHABETICAL LIST OF PLANTS

Dusky Monarch. Deep purple, 6 to 9 feet high.
Dr Lodinge. Mauve (petals sky-blue and rose), 3 feet.
King of Delphiniums. Pure Gentian blue, 6 feet high, very fine.
Persimmon. Sky-blue, deeper than belladonna, branching habit, 3 feet.
Moerheimii. White, branching, 6 feet high.
Queen Wilhelmina. Mauve (petals pale blue and rose), 6 feet.

> DIANTHUS, "Carnation." (N.O. Caryophyllaceæ.)

Not herbaceous, but so useful that they must be included as border plants. They should be propagated annually, the shoots being layered after flowering is over, and planted in their flowering quarters when well rooted, not later than October. Spring planting is no use. Sandy loam with old cow manure suits them best, but a stiff, well-drained soil is acceptable to them. They need to be firmly planted, and in a sunny, open part of the border. Some of the freest flowerers are :

> Audrey Campbell. Pale yellow, July to October.
> Countess of Paris. Pink.
> Crimson Clove. Clove-scented, dark red colour.
> Fred Vaughan. Striped red and dark red.
> George Maquay. White, July to September.
> Lady Hermione. Salmon.
> Mephisto. Dark velvet-claret.
> Mrs Nicholson. Rose-coloured.
> Mrs Sudway. Dark red.
> Raby Castle. Pink, showy in the mass, but with split calyx.
> Redskin. Red.
> Robinson Suisse. Rosy.
> Roy Morris. Scarlet.

The new race of perpetual flowering carnations (or American) are admirable for borders, as their growth is stiffer and more upright, not needing so much staking. They also flower continuously through the spring, summer, and autumn, and are best grown from cuttings struck in summer, planted under the shelter of a wall in October, when they will begin to flower in April. Another way is to plant out from greenhouse those that have been flowering all winter. Britannia treated in this way flowered till December here. The best varieties are :

Britannia. Scarlet, massive foliage and flowers.
Carola. Deep crimson, immense flowers, fragrant.
Enchantress. Pale pink and rose-pink.

## Mrs Lawson. Cerise.

May Day. Bright pink.
White Lazeson.- A white Enchantress.

> DIANTHUS, "Pinks." (N.O. Caryophyllaceæ.)

Low-growing edging plants with grey-green foliage, which does not die down in winter. Should be planted in sandy soil in a sunny situation. Propagation by cuttings struck in a cold frame.
D. barbatus (Sweet-William).
D. albino. Large white.
D. Early Rose. Bright pink, very early.
D. Her Majesty. Large white flowers.
D. Mrs Sinkins. Large white, free flowering.
D. Paddington. Pink, crimson centre.
D. The King. White ground, heavily marked crimson.

DICENTRA (Dielytra), "Lyre Flower." (N.O. Papaveraceæ.)
Old-fashioned border plant, glaucous, fern-like foliage, 3 feet high. Any soil, but liking a shady, sheltered situation. A good front-row plant. Propagated by division in autumn.
D. eximia. Rosy purple, 12 inches high.
D. spectabilis. Pink, 2 to 3 feet high.

## DICTAMNUS, "Burning Bush." (N.O. Rutaceæ.)

An old-fashioned border plant of handsome foliage with a curious resinous scent. The flowers give out a luminous vapour said to be inflammable. Succeeds best in a light soil, and grows 2 feet high. Propagated by seed sown when ripe or by its fleshy roots cut into pieces in the spring. Requires a sunny border.
D. caucasicus. Colour varying from mauve to deep purple, a large and handsome plant, 4 feet high.
D. fraxinella. Rose-coloured flowers on strong spikes, growing 2 feet high, and with a white variety.

DIGITALIS, "Foxgloye." (N.O. Scrophulariaceæ.) (See Biennials, p. 131.)

DORONICUM, "Leopard's Bane." (N.O. Compositæ.)
Showy early spring-flowering border plant, growing in any soil and situation, propagated by division in autumn. Increasing very rapidly.

## ALPHABETICAL LIST OF PLANTS

D. austriacum. Large yellow flowers like a dandelion, 12 to 18 inches high.
D. plantagineum excelsum (or Harpur Crewe). Bright yellow flowering on tall straight stems, 2 to 4 feet high, flowering at intervals from March to August.

## DRACOCEPHALU M, " Dragon's Head." (N.O. Labiatæ.)

Plants of the sage family, with one or two worth growing in the mixed border. Rich, light soil. Propagated by division.
D. japonicum. Bright pink, 3 feet high, flowers June to October.
D. speciosum. Mauve, 18 inches high, flowers June to September.
D. virginicum. Pink, 3 feet, June to September.

> ECHINOPS. "Globe Thistle." (N.O. Compositæ.)

Fine border plant from South Russia. Flourishes on any soil, with a distinct silvery foliage, ruthenicus and Ritro being the best varieties. Propagated by division or seed.
E. niveus. White flowers, silvery foliage, 4 to 5 feet high.
E. Ritro. Globular flowers of intense blue, $3 \frac{1}{2}$ feet high.
E. ruthenicus. Solid globular heads, lovely steel-blue.
$E$. spharocephalus. Whitish blue, 6 feet high.
All of them flowering from June to September.

## ELYMUS GLAUCUS, "The Lyme Grass." (Gramineæ.)

A native and ornamental grass of a silvery-bluish foliage, growing in good soil to 4 feet high. This plant, though very effective in a border, one should hesitate to establish among other plants, for it increases so rapidly that it becomes a perfect weed in any soil. Propagated by division.

## EPILOBIUM, "Willow Herb." (N.O. Onagraceæ.)

The only variety of this plant suitable for the border is $E$. angustifolium album, which has spikes of pure white flowers, and should only be planted in poor and sandy soil, as it spreads so rapidly. Increased by division.

## EPIMEDIUM, "Barrenwort." (N.O. Berberidaceæ.)

A dwarf plant with small, heart-shaped leaves. The only variety suitable for a border is pinnatum, a dwarf perennial from Asia

Minor, bearing long sprays of pale yellow flowers in March (closely resembling Celsia cretica). Increased by division in autumn.

## ERIGERON, "Flea Bane." (N.O. Compositæ.)

Free-flowering, showy plants resembling dwarf Michaelmas daisies and flowering in summer. Are all easily increased by division in autumn or spring, and flourish in any garden soil and in any situation.
E. aurantiacus. Beautiful bright orange flowers, 12 inches high.
E. grandiflorus. Deep mauve, 2 feet high, flowering May to July ; very showy.
E. glaucus. Evergreen glaucous foliage, large violet flowers, 12 inches high; June to September.
E. specioszes. Large mauve flowers with orange centre, 3 feet high, flowering May to October.

## ERODIUM, "Heron's Bill." (N.O. Geraniaceæ.)

The variety Manescavi is best suited to the border. It is not particular as to soil or situation, but unless on dry hard soil, with full exposure to the sun, will run to leaf rather than flower. It has showy crimson spikes, 1 to 2 feet high, flowering from May to September. Increased by careful division or seed.

## ERYNGIUM, "Sea Holly." (N.O. Umbelliferæ.)

A very ornamental race of plants for the border, unique in form and colour, with spiny leaves and flowers resembling thistles in their shape, the colour being a mixture of steel and ultramarine blue and silver. A light rich but dry soil and good drainage is a necessity for them, for while they will stand any amount of cold, they succumb to damp. They vary in height i to 4 feet. Increased by division and seed. July to September.
E. alpinum. Blue and white, $1 \frac{1}{2}$ to 3 feet high, the only variety requiring a stiff soil and shady situation; flower in July and August. 18 inches.
E. amethystinum. A beautiful blue, 1 to 2 feet high, often confused with $E$. Oliverianum, which is generally sent out instead of it, but which is a stronger grower.
E. Bourgati. Blue, in ovate heads, prickly leaves, 1 to 2 feet high, needs careful division.
E. giganteum or Ivory Thistle. Cream colour, slightly shaded with blue, 3 to 4 feet high.
E. hybridum. Fine blue colour, very distinct.
E. maritimum. Glaucous whitish colour, 1 foot high.
E. Oliverianum. Deep steel-blue foliage and flowers, very
handsome, growing 2 to 4 feet high.
E. planum. Blue flowers with much smaller heads, 1 to 2 feet high.
E. Springhill seedling. Deep steel-blue, finest colour of all.

EUPATORIUM, "Hemp Agrimony." (N.O. Compositæ.)
A showy, hardy plant for the back of the border. Any soil or aspect, though rather preferring a moist situation. Propagated by division.

The two varieties most suitable are the following :-
$E$. ageratoides. Feathery white flowers, growing in round bushes, 3 feet high ; flowers in summer.
E. purpureum. Heads of reddish-purple flowers of large size, 6 feet high ; flowers in autumn.

## EUPHORBIA, "Spurge." (N.O. Euphorbiaceæ.)

Fleshy-leaved plants, flowering in early spring, the most suitable for the border being E. pilosa major, bright yellow, growing in a compact clump 12 to 18 inches high, and covered with flowers. Growing in any soil or situation. Increased by division.

FRITILLARIA, "Crown Imperial." (N.O. Liliaceæ.)
A showy, stately plant, growing from shining green leaves, with a straight stem 2 feet high, crowned with drooping bells and leaves. These plants require rich, well-drained garden soil, deeply dug to maintain moisture. The bulbs should be put in with some sand round them to prevent them rotting away. Care should be taken to mark their position to avoid disturbance when forking or dividing other plants near them. Propagated by division every three or four years. Plant 6 or 8 inches deep in autumn. Flower in April.
F. imperialis lutea. Deep yellow.
$F$. aurora. Red.
F. Slaagsward. Large red.
$F$. sulphurine. Sulphur-yellow.
$F$. aurea marginata. Red flowers; handsome, variegated foliage.

## FUNKIA, "Plantain Lily." (N.O. Liliaceæ.)

Japanese plants valued for their foliage, hardy plants with fleshy, tuberous roots, flowering in middle and late summer. Not particular as to soil or situation, and flourishing exceedingly well
in London gardens. Increased by division in autumn or spring, as they spread rapidly.
$F$. Fortunei. Large leaves of lovely glaucous blue forming a bold plant ; lilac flowers; 2 feet in height.
$F$. grandiflora. White flowers, very fragrant, $2 \frac{1}{2}$ to 3 feet high, flowering in August and September, with light green foliage.
F. lancifolia. Small, narrow-leaved variety, white or lilac, 9 inches high.
$F$. variegata. Similar to above, but the foliage marbled with yellow.
F. ovata albo marginata. Large, light green leaves, broadly margined with white, chiefly grown for foliage, but with lilac flowers.
F. Thos. Hogg. Dark green leaves, with broad, white margins, spikes of flowers 2 feet long, of lovely rosy purple.

GAILLARDIA, " Blanket Flower." (N.O. Compositæ.)
A showy, hardy plant, flowering from early summer to autumn, from 18 inches to 3 feet high. They flourish best in hot, dry summers, and the soil should be well dug and mixed with decayed manure. Increased by division, cuttings, or seeds.
G. gigantea. Crimson, narrow edge of yellow, large flower.
G. John Harkness. Yellow and red, very hardy.
G. Matador. Yellow, narrow crimson ring, strong-growing.
G. Primrose Dame. Primrose flower with dark maroon disc.
G. Vivian Grey. Clear, yellow-fringed, with a deep yellow edge.

## GALEGA, "Goat's Rue." (N.O. Leguminosæ.)

Hardy, vetch-like plant, reaching to great heights in good soil, and flowering in masses of white or mauve. Any soil or situation, but requires staking and rich feeding, being so strong a grower. Flowers through the summer and autumn.
G. officinalis. Lilac. 4 to 5 feet.

| $G$. | alba. White, 4 to 5 feet. |
| :--- | :--- |
| $G$. | compacta. Lilac, also white, 2 to 3 feet. |
| G. | Hartlandii. Blue and white, 2 to 3 feet high. |

GALTONIA CANDICANS, "Cape Hyacinths." (N.O. Liliaceæ.)

A bulb from the Cape with heads of waxy white bells on stems 4 to 6 feet high, growing from handsome foliage. They are per-
fectly hardy; any soil or situation; flowering in July to autumn. They require feeding with liquid manure or mulching. Increased by dividing and replanting the offsets in September or October. The bulbs should be planted in March, 6 inches deep and 12 inches apart.

## GAURA. (N.O. Onagraceæ.)

A very graceful, hardy plant from North America, growing 4 to 6 feet high, requiring a light soil, and flowering in summer and autumn, increased by division or seeds.
G. coccinea. Bright pink and white.
G. Lindheimeri. Pink and white.

## GENTIANA, "Gentian." (N.O. Gentianaceæ.)

A showy and effective plant for edging, which requires very firm planting and plenty of moisture. Propagation by division in early spring or immediately after flowering, when top-dress with leafsoil also.
G. acaulis. Brilliant rich blue flowers.
G. asclepiadea. Purple-blue, flowering in late summer and autumn, from 18 inches to 2 feet high.

## GERANIUM, "Crane's Bill." (N.O. Geraniaceæ.)

Hardy border and edging plants, free flowering and showy, growing in ordinary soil and propagated by division or seed. They prefer a sunny spot, and are usually of a violet-blue colour.
G. armenum. Rosy-purple flowers, 2 to 3 feet high, flowering May to July.
G. lancastriense. Pale pink edging plant 6 inches high, flowering May to August.
G. pratense. Bright purple, 2 to 3 feet:
G. pratense (Mauve Queen). Mauve, 2 to 3 feet.
G. pratense floreplena. Double, resembling a Parma violet in form and colour.
G. sibiricum. Rich purple-blue, $1 \frac{1}{2}$ feet, June to August.

## GEUM, "Avens." (N.O. Rosaceæ.)

A hardy herbaceous plant with good foliage, growing in tufts, with leaves that are almost evergreen. It likes rich soil and plenty of moisture, and is not particular as to aspect. Increased by division in autumn or spring or by seed.
G. bulgaricum. Deep rich yellow flowers, 2 inches across, much-branched stems. Flowering throughout the summer.
G. Glory of Stuttgart. A fine orange-scarlet double flower.
G. Mrs Bradshaw. Large scarlet double flowers, 2 to 3 feet high, flowering June to October.
G. Mr Bradshaw. Orange, do., do., do.
$G$. miniatum aurantiacum (Parker's variety). Slender, branching stems smothered in orange-yellow flowers, 9 to 18 inches high.

> GILLENIA, "Indian Physic" or "Spiræa Foliata." (N.O. Rosaceæ.)

A hardy plant with numerous slender stems, bearing panicles of small white flowers, 2 feet high. It prefers a peat or free loamy soil, and flowers from July to September ; may be propagated by division.
G. stipulacea. A taller plant not quite so compact in habit, but requiring the same cultivation.

## GILLIFLOWER. (See Wallfower.)

## GLADIOLUS.

A beautiful race of bulbous plants which have recently been so improved by hybridizers in each hemisphere that when comparing them with those of twenty years ago the progress seems incredible. They are now to be had in every colour, including deep blue and yellow, and are most suitable for planting in bold groups among other plants and shrubs rather than in a large bed alone, as they do not last very long in flower, and are untidy when dying off. Any rich, free soil will suit them ; indeed, except in wet clay, or a very dry soil they will succeed anywhere. The ground should be well dug and manured in the autumn or winter, and planted with the bulbs in March.

If planted sooner they are apt to rot, and if later they will not ripen properly ; the fresh loam of a newly turned field is what they really revel in if such a thing can be got.

Each bulb should be planted 9 inches to a foot apart, and in a ring of 12 -inch diameter you could plant five or six bulbs from 2 to 3 inches deep. When well ripened off after flowering they should be dug up and stored in a dry, frost-proof place.

They are propagated from offsets, planted out on a good warm border in spring, and they flower from July to August.

The old scarlet brenchlyensis is always reliable, though in size it is now far exceeded by the newer sorts.

Gandavensis have a blotch on the petal. Childsii and Lemoinei are beautiful, self-coloured varieties. G. Colvillii are for forcing; and namus, the dwarf kind, can also be gently forced.

These are all the old varieties, and can be bought quite cheaply : but an entirely new race has been raised, and the size of the flowers is incredible. It appears they are coming very much into fashion, and the price of some of the new kinds is as much as $£ 10$, Ios. each.

The following received awards of merit from the R.H.S. :
G. Countess Amy. Rosy pink, streaked with crimson; all the petals have a white streak in the middle, and the two lower ones are blotched with cream ; flowers small, spike good.
G. Countess of Leicester. Salmon-pink blotched with a darker shade at the edge of the petals; base of lower petals amber-white, spotted with pink ; flowers very large, being 6 inches across, spikes $2 \frac{1}{2}$ feet long ; an excellent decorative variety, being the first to flower in the trial.
G. Duchess of Fife. Cerise-pink, lower petals blotched with creamy-white ; flowers medium, spikes bold.
G. Duke of Richmond. Carthamus-red, lower petals blotched with creamy-white ; flowers large, borne on a tall spike.
G. europa. White, with a faint trace of magenta at the base of the petals; flowers large, borne on a bold spike.
G. Fernando Cortez. Primrose-yellow, lower petals streaked with dull red ; flowers and spike medium.
G. gargantua. Pale rose, streaked with bright rosy magenta, white streak in the middle of the petals, middle lower petal blotched with white; flowers large, spike medium.
G. Lady Muriel Digby. Amber-white, upper petals margined with a delicate shade of pink, lower petals marked with blood-red and silvery mauve; flowers large, $4 \frac{1}{2}$ inches across, spike tall and bold.
G. La Luna. Creamy-white, lower petals blotched with crimson, flowers and spike good.
G. Le Triomphe. Pale rosy magenta, streaked with currant-red, lower petals blotched with creamy-white; flowers large, borne on a bold spike.
G. Miss Zena Dare. Amber-white, two lower petals pale yellow, streaked with dull crimson, flowers and spike medium.
G. primulinus. Primrose-yellow with a faint streak of crimson in the middle of some of the petals, flowers borne four or
five in a lax soil, about 18 inches long. Introduced from south-east tropical Africa in 1889.
G. safrano. Amber-yellow tinged with magenta at the base of the petals, which are waved; flowers and spikes medium.
G. utopia. Pale cerise-pink, splashed with a little crimson, lower petals having pale yellow markings ; flowers medium, spike good.

## GYPSOPHILA, "Chalk Plant." (N.O. Caryophyllaceæ.)

This plant is sometimes known as the gauze flower from its sheets of tiny white flowers, looking like grey gauze thrown over the plant. It thrives in any soil and in any situation and requires staking out. The double kind of recent introduction is one of the few examples of a flower that has been improved by doubling. Owing to its long, tap-shaped roots, it is difficult to divide except in its earlier stages. It can be propagated by seeds sown in April in a sunny place out of doors.
G. paniculata. 2 to 4 feet high, flowering from June to August.
G. paniculata floraplena. A pure white double form, growing 2 to 4 feet high, flowering June to August.
G. subulosa. White, erect habit, growing from $I \frac{1}{2}$ feet high and flowering from June to August.

## HELENIUM, "Sneeze-weed." (N.O. Compositæ.)

Vigorous, hardy plants from North America, flowering from July to October. They form fine bushy plants covered with masses of flowers which last well in the borders. They are easy of cultivation in any soil or aspect. Propagation by division.
H. autumnale. Pure yellow, growing from 4 to 5 feet high and flowering June to October.
H. grandicephalum. A rich yellow flower, growing $3 \frac{1}{2}$ feet high, very useful for cutting.
H. Hoopesii. Bright orange-yellow, large flowers on branching stems. One of the finest flowering Compositæ that there is.
H. pumilum. Pure yellow, very free, $\mathrm{I} \frac{1}{2}$ feet high, flowering from June to October.
H. striatum. Deep yellow striped with a reddish brown. An old plant reintroduced. The brown turning to a brilliant crimson in a fine summer and with good cultivation. $4 \frac{1}{2}$ feet high to $5 \frac{1}{2}$ feet.

## ALPHABETICAL LIST OF PLANTS

Two varieties of the above, called Riverton Beauty and Riverton Gem, are said to be a great improvement on striatum, one having flowers of lemon-yellow with a dark centre, and the other brilliant red and gold flower-heads.

## HELIANTHUS "Annual Sunflower." (N.O. Compositæ.)

A race of vigorous showy plants giving no trouble as to cultivation ; they will flourish in any soil, but appreciate occasional mulchings of manure, as they are gross feeders. A position at the back of the border suits them, admirably. The variety rigidus or harpalium, though among the best of autumn flowers, should never be planted in a border with any other plant, their tuberous roots growing and sending up new shoots to a distance of 6 and ro feet ; and, once it gets hold of a border, it is almost impossible to eradicate it. Should be propagated by division in autumn or spring.
H. decapetalus. Flowers of rich sulphur-yellow, 2 inches across, and growing 4 to 6 feet in height ; flowering August to October.
H. " plenus. Clear yellow, double, from 3 to 4 feet high, flowering from August to September.
H. Soleil d'Or. Bright yellow, double, 4 feet high, flowering August to September.
H. Etoile d'Or. Bright yellow, finest of all the double varieties.
H. Maximilianus. Pale yellow flowers, 3 inches in diameter, with narrow, twisted petals, 4 feet high ; flowering in September.
H. H. G. Moon. Rich golden yellow, 4 feet high, August to October.
H. Miss Mellish. Semi-double flowers, 6 inches across. A bright yellow. Height 5 to 7 feet, flowering in July to September.
H. Rev. Wolley Dodd. Bright yellow, semi-double, flowering very late, to the end of October.

## HELIOPSIS, "Orange Sunflower." (N.O. Compositæ.)

Autumn-flowering plants, growing 3 to 4 feet high, with erect, wiry stems, flowering from June to October, easily cultivated in any situation.
H. compacta floribunda. Deep yellow flowers of compact habit, 3 feet high.
H. B. Badhams. Orange, large flower. The best variety.

## 244 HERBACEOUS GARDEN

H. patula. Yellow flowers, very free; 3 feet high.
H. zinniafolia. Bright yellow flowers rather like Zinnia, growing 2 feet high.

HELLEBORUS, "Christmas Rose." (Ranunculaceæ.)
Very useful plants flowering at a time when very little else is in bloom. They require a shady border, and a preparation of rich loam and manure, mixed with a little sand, and the soil should be deeply trenched. They do not like removal, and transplanted pieces take three or four years to establish. The best known of the family is H. niger, the Christmas rose, and its varieties angustifolius, Mlle. Fourcade, and maximus, white flowers slightly tinged with purple. These require the shelter of handlights in winter. The flowers are from 3 to 6 inches high, and the pale green, smooth, leathery leaves are palmate, divided into five or nine segments. All are easily increased by root division.

## HELLEBORUS ORIENTALIS, "Lenten Roses."

These thrive in any garden soil, in a shady border. The soil should be as deep and moist as possible, well drained with grit or coarse sand or garden sweepings. A border facing west, or slightly shaded by trees, is very suitable. The Lenten roses grow very much taller than the Christmas roses, from 18 inches to 2 feet high, with large foliage and flowers of every shade of white, green, purple, red, and crimson.
H. albus grandiflorus. Loose heads of white flowers, faintly tinged with green.
H. Admiration. White, spotted red.
H. Albinotto. White spotted with purple.
H. Apotheker Bogren. Large purple-spotted flowers.
H. Diadem. Rose, spotted with purple.
H. Dr Moore. Rose.
H. Duchess of Cleveland. Mauve.
H. Guttatus. Large pure white flowers with deep red spots.
H. Labyrinth. Dark purple, spotted with black.
$H$. punctatus. Deep purple, heavily spotted.
H. W. E. Gladstone. Pale pink flowers, no spots.
H. Willie Schmidt. Large pure white flowers.
(All these varieties bloom from October to March.)
HEMEROCALLIS, "Day Lilies." (N.O. Liliaceæ.)
Plants with tall bold foliage, flowering in early summer, and a valuable plant for half shade; if grown in full sun they should be kept moist at the roots. Propagation by division every two years.

## ALPHABETICAL LIST OF PLANTS

H. aurantiaca major. Deep orange, sweet-scented flowers, growing 2 to 4 feet high.
H. Ajax. Orange-yellow, very fine.
H. Beronii. A new hybrid, flowers of clear citron-yellow.
H. Citrina. Pale citron-yellow, 2 to 4 feet high.
H. Dr Regal. A new, late-flowering hybrid, with apricot flowers of fine form, $2 \frac{1}{2}$ feet high.
H. flava major. Butter-yellow, 2 to 3 feet high.
H. Flamid. A new, early-flowering orange-coloured hybrid.
H. Sir Michael Foster. Soft apricot-yellow, 3 feet high.
H. Sovereign. Yellow and bronze.
H. Kwanso. Foliage variegated, double bronzy-yellow flowers very fine.
H. ochroleuca. Pale primrose-yellow.

HEPATICA, " The Flowering Liverwort." (N.O. Ranunculaceæ.)

Useful front-row plants, flowering in early spring, forming compact clumps and preferring sandy loam, well enriched, and peat mould. They like a shady and moist position, where they will obtain shade in the summer and sun in the spring. Can be planted in October or November, or even when in flower in March. Propagation by division, but it does not do to disturb them more than once in six or seven years. Will also grow from seed sown in sandy soil in cold frame.
H. angulosa. Large single flowers, rich blue.
H. ", alba. White.
H. " lilacina. Lavender-blue.
H. , rosea. Pink.
H. triloba alba. White.
H. " alba floreplena. Double white, recently reintroduced after having been lost for many years.
H. corulea. Light blue.
H. ", floreplena. Double light blue.
H. rosea plena. Double pink.

## HESPERIS, "Rocket." (N.O. Cruciferæ.)

Fine old herbaceous plant, deliciously scented, and blooming when flowers are scarce for cutting, namely, in May. The single and tall varieties in white, mauve, or purple are very easy of cultivation, and are not particular as to soil or situation. Are best grown from seed sown in April out of doors, and transplanted in June. The double varieties are much more difficult to grow, and are very apt to die

## 246 HERBACEOUS GARDEN

out. They should be divided at least every second year and transplanted, but it is wiser to take cuttings' of the young shoots the autumn before they flower, as they flower themselves to death. Several of the older forms have practically died out.
H. matronalis floreplena. White to flesh or French white. H. ",,$\quad$ Pure white of dwarfer growth.
H. purpurea floreplena. Old double purple variety, There is also a lilac-coloured one.

## HEUCHERA, "Alum Root." (N.O. Saxifragaceæ.)

A compactly growing plant with pretty bluish foliage, practically evergreen. It is of the simplest culture, and thrives in any ordinary garden soil except stiff clay. It is perhaps happiest at the edge of a raised border, where it will seed freely, grit or mortar-rubble being particularly suitable for it. Best as a front-row plant. Can be propagated by seed or by division, and should be broken up after three years, as after that time it does not flower well. Flowering in May to August.
H. bracteata splendid. A hybrid between bracteata and sanguinea.
H. brizoides. Pale pink, 9 inches high.
H. Caprice. Handsome dark bronzy foliage, slender spikes of crimson flowers.
H. Caprice. Salmon-pink flowers, 2 feet high; May to July.
H. Edge Hall. Hybrid, 18 inches high, rose-coloured flowers.
H. Flambeau. French variety. Erect branching stems, and dense spikes of flame-coloured flowers; 2 to 3 feet high.
H. gracilima. Pale pink, very graceful, 2 feet high.
H. grandiflora. Bright coral-red on long stems, a finer form than the type sanguinea; 1 to 2 feet high.
H. Nancy Perry. Pink flowers tipped with bright red, 2 feet high.
H. Radium. Dark ruby-red, $\mathrm{I} \frac{1}{2}$ feet high.
H. Rosamond. Branching stems of coral pink, 2 feet high.
H. virginale. Large-flowered white, 2 feet.
H. Walker's Variety. Large flowers of rich crimson.
H. zabiliana. Bright pink, $2 \frac{1}{2}$ feet high.

HIERACIUM, "Hawkweed." (N.O. Compositæ.)
Strong-growing border plants. Too robust for any but hot, sunny situations. Propagated by division.

## ALPHABETICAL LIST OF PLANTS

H. aurantiacum. Deep orange-red; from I to $\frac{1}{2}$ feet high; flowering from June to August.
H. villosum. A handsome plant with silvery foliage and showy yellow flowers.

HOLLYHOCKS, "Althæa Rosea." (N.O. Malvaceæ.) (See Annuals.)

## HORMINUM, "Pyrenean Dead Nettle." (N.O. Labiateæ.)

A plant with dense tufts of foliage suitable for the edge of the border, and with spikes 9 inches high of bright purple flowers, which appear in July and August. Increased by seed.

HYPERICUM, "St John's Wort." (N.O. Hypericaceæ.)
Handsome heavy shrubby plants with evergreen leaves, equally happy in full sun or under the shade of evergreen trees. Propagation by division.
H. Androsamum (Sweet Amber). Yellow, 2 feet high; flower July to September.
H. Ascyron. Large shining yellow flowers with scarlet anthers.
H. calycinum. Large shining yellow flowers, 12 to 18 inches high ; flower in June to September.
H. Moserianum. Large yellow flowers with red anthers, under 2 feet high ; flowering June to October.
H. Moserianum tricolor. Green leaves, shaded with yellow, margined with red, yellow flowers with scarlet anthers; 2 to 3 feet high!; flowering June to October.
H. olympicum. Bright yellow in symmetrical bushes, I foot high ; flowering June to October ; requiring a hot, sunny spot. The shrubby species including Moserianum should be pruned into shape in February, and are propagated by cuttings. The herbaceous perennials are propagated by division, also by seed.
IBERIS, "Candy-tuft." (N.O. Cruciferæ.)

The easiest grown of any perennial, succeeding on any soil, and evergreen. Propagated by seeds or cuttings.

For the annual variety, see "Annuals."

1. iberis correafolia. One of the best evergreen candytufts, flowers very large, compact heads of pure white, I foot high, and flowering in June and July.
I. gibraltarica. A distinct kind larger than all the others, with flowers of delicate lilac and white, 12 inches high, flowering in May and June.
I. semperflorens. Pure white, flowering April to June.
I. ", florepleno. Snow-white double flowers, I foot high, flowering from April to June.
2. Tenoreana. Flowering in early spring, a continuous blossoming, with mauve flowers.

## INCARVILLEA, "Trumpet Flower." (N.O. Bignoniaceæ.)

Hardy perennials with rosy-purple flowers resembling the bignonia in form, quite hardy on a well-drained, sunny border with light rich soil. Propagated by seed or division.

```
INULA, "Flea Bane." (N.O. Compositæ.)
```

Coarse-growing native plants, thriving in any garden soil, but of no great value for the border, Inula glandulosa grandiflora being perhaps the best of them, with deep yellow flowers and broad foliage.
I. Hookeri. Large yel.ow flowers, growing $2 \frac{1}{2}$ feet high, flowering June to August.
I. Oculus-Christi. Similar to glandulosa, but much larger, flowering July to August.
IRIS ALATA, "Scorpion Iris." (N.O. Irideæ.)

Lilac-blue and yellow, 6 inches high, flowering October to December. Propagation by offsets. These plants thrive in a rich light soil in a sunny aspect, and should be given a light dressing of old manure.

> IRIS APHYLLA, "Leafless Iris." (N.O. Irideæ.)

Violet, I to $2 \frac{1}{2}$ feet high, flowering in May and June. Propagated by division.
IRIS AUREA, " Golden Iris." (N.O. Irideæ.)

Bright yellow, 3 to 4 feet high, flowering in July. Propagated by seed or division. A hardy and useful plant, liking a moist loam or loam and peat, but will thrive in uncongenial soil.

> IRIS BOSNIACA, "Bosnian Iris." (N.O. Irideæ.)

Yellow and orange, growing 9 to 15 inches high, and flowering in spring. A new dwarf variety. Propagated by seed or division.

## ALPHABETICAL LIST OF PLANTS 249

## IRIS CAUCASICA, "Caucasian Iris." (N.O. Irideæ.)

Primrose, 6 to 9 inches high, flowers in February and March and is propagated by offsets. It likes a light rich soil with a dressing of old manure, and should be planted in a sheltered position.

## IRIS CHAMÆIRIS, " Ground Iris." (N.O. Irideæ.)

Yellow, growing 6 inches high and flowering in April and May. Propagated by division. This is a lovely dwarf iris with several varieties, liking a light rich soil and a sunny aspect, and should be given a light dressing of old manure. This plant benefits by division about every third year.

## IRIS CRISTATA, "Crested Iris." (N.O. Irideæ.)

Lilac and yellow, 4 to 6 inches high, flowering May to June. Propagated by division. A good plant for the rockery, liking a sandy and peaty loam, with plenty of moisture in summer. It should be planted in partial shade.

IRIS FLAVESCENS, "Yellow Iris." (N.O. Irideæ.)
Pale yellow, 2 feet high, flowering in June. Propagated by division. A beautiful hardy species, not particular as to soil, but should be planted in a sunny position.

## IRIS FGETIDISSIMA, " Gladwyn-Roast Beef Plant." (N.O. Irideæ.)

Very pale lilac, insignificant flower followed by red berries in autumn, growing 2 to $2 \frac{1}{2}$ feet high. Propagated by division or seed. Native plant not particular as to soil, but preferring a moist loam. Happy in shade.

> IRIS GATESII, "Gates' Iris." (N.O. Irideæ.)

Light grey and cream, $1 \frac{1}{2}$ to $2 \frac{1}{2}$ feet high, flowering in June. Propagated by division. A hardy plant liking a light, loamy soil well drained, with an admixture of bone meal. It requires shallow planting, about December, and should be placed just below the surface.

IRIS GERMANICA, "German Flag Iris." (N.O. Irideæ.)
Purple, blue, and white, growing 2 to 3 feet high, and flowering in May and June. Propagation by division in early autumn, or by seed sown when ripe. The well-known flag iris, which thrives in
almost any soil and is not particular as to situation, and is one of the most easily cultivated of all our garden plants. The following are some of the varieties of this popular species :-Kharput, Kochi, Purple King.

IRIS HISTRIO, "Actor's Iris." (N.O. Irideæ.)
Lilac-purple and yellow, flowering in January and February. Propagation by offsets.

## INTERMEDIATE IRIS.

A group of dwarf hybrid irises produced by a cross between Iris Germanica and olbiensis and kindred species. They resemble the former, but only grow 12 to 18 inches in height, and flower two to three weeks earlier. They can be grown in any border, and require no special soil or treatment. The flowers are large, and many are sweetly scented, and are most useful for cutting.
I. Bosniac. Silvery white and shaded primrose flowers.
I. Brunette. Pale yellow, very dwarf, one of the earliest to flower; sweetly scented.
I. Canary. Pale yellow flowers.
I. Charmant. Palest blue and striped blue.
I. Don Carlos. Rich blue and violet.
I. Dorothea. French-white tinged with blue, lavender-white heavily tinged with blue.
I. Empress. Creamy yellow, sulphur-yellow beard.
I. Etta. Pale sulphur, sweetly scented.
I. Freya. Pearl-violet.

1. Halfdan. Soft yellow.
I. Helge, Light citron-yellow, very free-growing.
I. Ingeborg. Ivory-white, orange, orange beard, very dwarf and free-growing.
I. Ivorine. Large pure white flowers with yellow beards, considered to be the finest variety in this group.
I. Prince Victor. Large flowers of rich blue and crimsonpurple.
T. Royal. Blue and violet, dwarf, very free.
I. Walhalla. Soft lavender.

## IRIS LÆVIGATA, " Japanese Flag Iris." (N.O. Irideæ.)

In a diversity of colours, flowering July and August, growing 2 to 3 feet high. Propagated by division or seed. A beautiful species, but not hardy, liking a very moist soil and sunny situation, and impossible to grow in ordinary borders.

## ALPHABETICAL LIST OF PLANTS

IRIS LUPINA, "Wolf's Beard." (N.O. Irideæ.)
Greenish yellow with black blotches, 6 inches high, propagated by division, liking a well-drained soil.

## IRIS MONNIERI, " Golden Iris." (N.O. Irideæ.)

Lemon-yellow, flowering in June and July, growing 3 to 4 feet high. Propagation by division or seed. A hardy plant, useful for growing near water, spring being the correct time for planting.

## IRIS ORIENTALIS, " Eastern Iris." (N.O. Irideæ.)

Yellow and white, flowering in June and July, growing 5 to 6 feet. Propagated by division. Liking a rather moist soil and shady situation.
IRIS PALLIDA, "Orris Root." (N.O. Irideæ.)

Lavender-blue, flowering in June, growing 2 to $2 \frac{1}{2}$ feet high. Propagation by division. A good plant for the border.

## IRIS PUMILA, "Dwarf Crimean Iris." (N.O. Irideæ.)

Lilac-purple, flowering in April and May, 6 inches high. Propagated by division or seed. This species likes a rich, light soil with a light dressing of old manure, and it should be planted in a sunny situation.

## IRIS RETICULATA, "Netted Iris." (N.O. Irideæ.)

Yellow and violet, flowering in February and March, growing 6 inches high. Propagated by seed and offsets. They thrive in a well-drained, rich sandy soil, and should be planted in a sunny situation, but resent disturbance, and should be protected from any wind.

> IRIS SIBIRICA, "Siberian Flag." (N.O. Irideæ.)

White and purple, flowering in June, growing $2 \frac{1}{2}$ feet to $3 \frac{1}{2}$ feet high. Propagated by division or seed. It likes a moist, rich soil and a sunny situation.

IRIS SUSIANA, " Mourning Iris." (N.O. Irideæ.)
Dark purple-brown, flowering May to June, and growing $\mathrm{I} \frac{1}{2}$ to 2 feet high. Propagated by division. Not a very hardy species, which should be planted in a sheltered position in a light soil.

## IRIS UNGUICULARIS, "Algerian Winter Iris." (N.O. Irideæ.)

Lavender-blue, growing 6 inches high, and flowering from January to April. Propagated by seed or division. A beautiful plant liking a light soil and a dry and shady situation, preferably near a wall.

## IRIS XIPHIOIDES, "English Iris." (Irideæ.)

Several colours, flowering in June and July, and growing from $1 \frac{1}{2}$ to 2 feet high Propagation by seed or offsets. They should be divided in August or September every second or third year and should be planted in a light soil with plenty of sand about the bulb and in a shady position.

## IRIS XIPHIUM, "Spanish Iris." (Irideæ.)

In many colours, flowering in June, and growing $1 \frac{1}{2}$ to 2 feet high. Propagated by seed or offsets. A hardy species not particular as to soil or situation, but thriving best in a good light soil and in a fairly sunny and sheltered situation, and should not be disturbed for three or four years.
I. Delavayi. Rosy-mauve shade, handsome and effective, growing $2 \frac{1}{2}$ feet high, and flowering in July.
I. grandiflora. Rich rose colour, with large open trumpet flowers, 18 inches high, flowering in June.
I. L. Olgie. Purple flowers, 3 feet high, flowering in July.

> IRIS FLAG. (N.O. Irideæ.)

JASIONE, "Sheep's-bit Scabious." (Campanulaceæ.)
From 6 to 12 inches high, a family which is usually seen in the rock garden, requiring a light and sandy soil well enriched and sheltered. Flowering June to August. Two varieties suitable for the border are the following :-
J. Janka. Pretty blue flowers 9 inches high.
$J \cdot$ perennis. Bright blue flowers in dense heads, I foot high, both propagated by seed or division.

## KNIPHOFIA ALOIDES. (See Tritoma.)

LACTUCA BOURGÆI, "Giant Lettuce." (Compositæ.)
A tall-growing plant with handsome, grey-blue flowers, growing 6 or 8 feet high, and requiring a great deal of room in a border. It flowers in August, and is propagated by division.

## ALPHABETICAL LIST OF PLANTS

LAMIUM, "Dead Nettle." (N.O. Labiatæ.)
A perennial plant occasionally useful in poor dry soils where nothing else will grow, on dry banks, or under trees.
L. garganicum. In whorls of purplish blossoms from 1 to $\frac{1}{2}$ feet high, and flowering in summer.
L. ", album. White.
L. maculatum. Has leaves blotched with silvery white.
L. Orvala. Rose-coloured flowers in April and May, preferring slight shade, 2 feet high.

## LARKSPUR. (See Delphinium.)

## LATHYRUS, "Everlasting Pea." (N.O. Leguminosæ.)

Hardy plants somewhat resembling the sweet pea, but without any scent, and with long fleshy roots. Admirable for a low wall or trellis, and will scramble over any bushes or plants that have gone out of flower. They are not particular as to soil or situation as long as they can have deeply cultivated root-run. Propagation by division in spring or by seed.
L. cyaneus. Light blue dwarf plant, 9 to 12 inches high, flowering in April and May, and liking a sunny spot.
L. grandiflorus. Flowers produced in pairs. Flower described as crimson, but with a magenta tone. June to August.
L. latifolius. The common Everlasting Pea, bright rose colour, flowering in July and August.
L. " albus. White, July and August.
L. " (White Pearl). Large white flowers, July to October.
L. " (Pink Beauty). Pink flowers in large clusters.
L. " (Apple-blossom). A new variety, described as pale pink and white.
L. rotundifolius. An old and rather scarce species, with much smaller flowers, of very uncommon brick-red colour. Well worth growing. Flowering in June, and propagated by division in spring.
L. superbus. Light purple flowers, 18 inches high, and flowerin May and June.
L. tuberosus. Bright rose, 3 feet high, flowering June to August.

LAVANDULA, "Lavender." (N.O. Labiatæ.)
A plant so well known as to hardly require describing. Its grey foliage, when clipped in autumn, adding much to the beauty of the

## 254 HERBACEOUS GARDEN

border, the flowers being largely grown for cutting and drying, owing to their fragrance. It will grow on any soil, though a sandy or friable loam suits it best. In its third year it becomes leggy and must be renewed. Propagated by cuttings taken in autumn or by seed.
L. Grappenhall. A tall, strong-growing variety.
L. Munstead. Low-growing dwarf variety. Deep blue-purple, flowering in June, 18 inches high. Should always be planted in front of the taller growing kinds.
L. spica. Pale violet, flowering in July and August, $2 \frac{1}{2}$ feet high.
L. vera. The old English variety, given by Nicholson as identical with spica, and of which there is a scentless white form.
LAVATERA, "Tree Mallow." (Malvaceæ.)

Pale rose growing 4 to 7 feet high, best suited to the back of a large border, flowering in July and August.
L. trimestris. (See Annuals.)

LENTEN ROSE. (See Helleborus.)

## LEUCOJUM, "Snowflake." (N.O. Amaryllidaceæ.)

Graceful plants with flag-like foliage not particular as to soil or situation, but are at their best in moist places in deep soil. The flowers are useful for cutting. Propagated by division.
L. estivum (Summer Snowflake). White and green, $2 \frac{1}{2}$ feet high, flowering in May and June. Though said to be a native of Central Europe, it grows wild in parts of England along the banks of streams, notably in Berkshire, where it is known as the Loddon lily.
L. autumnale (the Autumn Snowflake). White. Growing from 4 to 6 inches high, and flowering in August and September.
L. vernum. White and green, 6 to 8 inches high, and liking light rich soil. Flowering March to May.

> LIATRIS, "Blazing Star." (N.O. Compositæ.)

Purple and reddish-purple flowers in long dense spikes, liking rich light soil and peat, and which are very happy in a damp border. Propagated by division in spring or by seed, and chiefly suited for the back row of a large border.

## ALPHABETICAL LIST OF PLANTS

L. elegans. Purple flowers in stout spikes, 4 feet high, flowering August and September.
L. graminiflora. Handsome spikes of pink flowers, 3 feet high. August and September.
L. pycnostachya. Crimson-purple flowers; a fine, muchbranched variety, 4 feet high.
L. scariosa. Dark purple in fine spikes 3 feet high, flowering August to September.
L. spicata. Spikes of purple flowers, 2 feet high. September and October.

LIBERTIA, "Satin Flower." (N.O. Irideæ.)
A graceful plant with iris-like leaves and white flowers, requiring a sheltered situation in free, peaty soil. Propagated by seed or by division in spring. The varieties are :-
I. formosa. White, 18 inches to 2 feet high, with fine green foliage. Flowering in May and June.
L. grandiflora. White flowers, 3 feet high, flowering in July, a better variety than the preceding one.
L. ixioides. White, with pale yellow stamens, 2 to 4 feet high, flowering June to August.

## LILIUMS, "Lily." (N.O. Liliaceæ.)

These are the most beautiful bulbous plants we have, flowering in late spring, early summer, and late autumn, and in exquisite colourings of white, yellow, orange, pink, and crimson tints. Many are difficult to establish, especially in stiff, damp soils, and it is proposed here only to mention those of easy cultivation in the border. When once planted, they should be left undisturbed. Propagated by offsets. It may be taken as a rule that they prefer a light deep soil well enriched with either old manure or peat, bearing in mind that the bulbs should never be placed in contact with manure when planted, and that a mulching in April either with peat-moss litter or with decayed manure is very beneficial, and will help to prevent the cutting, drying action of cold winds in spring. They should be planted in September as soon as the stems have died down and the bulbs have become dormant. Water in summer is generally necessary, and it is wise to place a little sand and charcoal round the bulbs when planting. Snails and slugs must be carefully guarded against, and a ring of cocoa-nut-fibre refuse, ashes, or a mixture of soot and lime will help in keeping them off. The flower-stems should not be cut down

## 256 HERBACEOUS GARDEN

until they have turned yellow, and 9 or ro inches of stem should always be left to prevent the rain washing into the centre of the bulb and so causing it to die out. It is not easy to grow lilies on clay, though Lilium auratum are said to enjoy a dressing of powdered clay in spring. Should anyone possessing a clay soil wish to grow lilies, the surface of the bed should be raised a foot above the surrounding level and the soil thoroughly worked to a depth of 3 feet with a good admixture of garden sweepings, leaf-mould, or grit worked in, if peat is not available.
L. auratum. White, with bands of golden yellow, or crimson down the centre of the petals. From 3 to 6 feet high. Requires a porous rich soil and to be planted 9 inches below the surface. August to October.
L. Brownii. Sometimes called japonicum or Krameri. A trumpet lily, brownish white, and liking much the same soil as auratum. Should be planted 6 inches below the surface, and grows 2 to 4 feet high. Flowering July and August.
L. canadense. Orange, spotted with purplish brown, with drooping blossoms; requiring a partially shaded position and moist, peat soil, though it will flower in good garden mould. It also requires shallow planting.
L. candidum (Madonna Lily). White, 3 to 4 feet high, liking a sunny position in good rich loam, with chalk or old lime intermixed. It likes plenty of water in the summer, and is best left undisturbed. It should not be planted deeply, and this is best done in August. This beautiful lily is very capricious, and if it fails in one part of the garden, may yet succeed perfectly in another. No certain cure has yet been found for the disease which devastates it in many gardens, but shaking the bulbs in a sack with sulphur before planting them is advisable, or they may be sprayed from March to May occasionally with a weak solution of black sulphur and water. Flower in June and July.
L. chalcedonicum. An old fiery-coloured variety known as the scarlet turncap lily. It is one of the easiest to grow in the border, and may be left undisturbed for years. It requires shallow planting, grows 2 to 3 feet high, and flowers in July and August.
L. croceum. Another good border lily, orange spotted with black, easily grown in a sunny border or in partial shade, deeply planted, and with a subsoil of cow manure, 3 feet high, flowering in July.
L. davuricum. Scarlet; 2 to 3 feet high, flowering in June, and not objecting to dry soil.
L. elegans or Thunbergianum. Colouring varying from apricot to red. A dwarf, hardy species useful for growing in masses in the border, and not particular as to soil or situation. There are several varieties of this lily:

Alice Wilson. Lemon-yellow.
Horsmanni. Mahogany-red.
venustum or Batemanni. Apricot.
Van Houttei. Crimson-red, spotted with black.
Wallacei. Orange-red, spotted with black.
Wilsonii. Apricot-yellow.
L. giganteum. A tall-growing, magnificent lily, requiring cool, deep soil, and not altogether satisfactory for a border. 6 to 12 feet high. Terminated by a huge racemes 1 to 2 feet in length, with fragrant white flowers. It is perfectly hardy, but unless slightly shaded by an undergrowth of thin shrubs in spring, it is apt to die out. It requires sandy peat and leaf-mould for soil, or the loamy soil of a cool wood.
L. Grayi. Reddish orange. Very similar to L. canadense, and needing similar treatment and position.
L. Hansoni. Orange-yellow spotted with brown. It is quite hardy, and should be grown in large clumps. It flowers in the beginning of June, and is not so particular as to soil as some of the others. Likes a little peat and road-scrapings in the compost. 3 feet high. Deep planting.
L. Henryi. A variety of recent introduction, creamy-orange colour, flowering in August and September, and growing 3 to 5 feet high ; and should be closely planted, as the individual flowers are small.
L. Humboldtii. A very elegant lily from California of the Martagon type. Orange-yellow spotted with purple. 4 to 5 feet high, and blooming in July. A good border variety, liking shallow planting in deep strong loam.
L. japonicum. (See Brownii.)
L. longiflorum. Beautiful white lily, sometimes known as Bermuda lily, but which dies out unless grown under very favourable conditions, and not recommended for general use.
L. Martagon. Very hardy, free-growing lilies. The curious dull purple colour being of no great beauty, and in great contrast to the really lovely white form. This white Martagon should be planted not later than September. It likes cool,

## 258 HERBACEOUS GARDEN

deep soil enriched with leaf-mould, and without manure or sand, and should not be planted deep. Flower in June and July.
L. monadelphum szovitsianum. Sometimes called Colchicum lily. Lemon-yellow, sometimes spotted. It flowers in July, and thrives best in deep, loamy soil well enriched with good manure and shallow planting. It is not seen at its best until well established.
L. pardalinum. Scarlet-orange, spotted brown, known as the Panther lily, 6 to 8 feet high, flowering in August and September. It likes a deep, light, good soil, well enriched, and some sheltered position with partial shade of shrubs or trees. There are several varieties in crimson, orange, and yellow colours, Bourgai being one of the finest.
L. Parryi. Trumpet-shaped flowers of yellow spotted with chocolate-red, of distinct form, requiring peat loam and plenty of coarse sand ; in a slightly shaded place, flowering in June and July, 2 to 4 feet high.
L. polyphyllum. A Himalayan lily, creamy white spotted with purple, flowering in July. Not an easy lily to grow; requiring well-drained, sandy peat or leaf-mould mixed with a little charcoal and old stable manure.
L. speciosum. The well-known lily seen in florists' windows in white, pink, or crimson-spotted flowers. These handsome lilies require shelter from wind and draughts, and a rich loamy soil, deep planting, and a little shade. They grow from $\mathrm{I}_{\frac{1}{2}}$ to 3 feet high, and flower from August to October. Sometimes known under the name of lancifolium.
L. superbum. Orange-red with purple stems, 5 to io feet high, requiring a cool, deep soil, and more suited for woodland planting than for a border.
L. testaceum. Yellow tinged with red, known as the Nankeen lily, 3 to 5 feet high, flowering in July and August, and a most useful border plant, thriving in any soil, and even flourishing in London. It requires shallow planting, and resents disturbance.
L. tigrinum (Tiger Lily). Orange-red, spotted with black. A well-known border plant, with a finer variety called splendeus. Thrives in deep sandy loam in an open but sheltered position, and propagated by the bulblets which form in the axils of the leaves. The double-flowered variety floreplena is a showy and vigorous plant. These lilies grow from 3 to 4 feet high, but splendeus will some-

## ALPHABETICAL LIST OF PLANTS

times reach 7 feet. Fortunei is also very tall, with woolly stems.
L. washingtonianum. White and purple-spotted flowers, 2 to 5 feet high, but not easy to grow. Liking peaty, well-drained, yet moist soil.

## LINARIA, "Toad Flax." (Scrophulariaceæ.)

Showy perennials liking gritty, sandy soil. Propagated by division, and growing $2 \frac{1}{2}$ to 3 feet high.
L. Dalmatica. Bright yellow flowers and glaucous leaves, and flowering from July to September. This variety will succeed even on clay.
L. pancici. Yellow and orange, flowering July to August, i8 inches high. Propagation by division or seed.

LINDELOFIA SPECTABILIS, "Himalayan Lungwort." (N.O. Boraginaceæ.)

A showy perennial with clusters of deep purple-blue flowers, flowering in June and July, and thriving in any good light soil.
LINUM, "Flax." (N.O. Linaceæ.)

Border plants with light graceful stems, not particular as to soil as long as it is well drained.
L. Alavum. Bright yellow, I to 2 feet high, flowering in August and September. Propagation from seed, division, or cuttings, with an orange form of recent introduction.
L. narbonense. Lovely sky-blue flowers, $\mathrm{I} \frac{1}{2}$ to 2 feet, flowering from June to September. Propagated by seed or division and not quite hardy.
L. perenne (syn. L. Lewesii). Blue, $\mathrm{I}_{\frac{1}{2}}$ to 2 feet, hardier than narbonense, flowering June to September. Propagated by seed or division.

## LITHOSPERMUM, " Gromwell." (N.O. Boraginaceæ.)

Showy blue flowers suitable for edgings, and liking a sunny, welldrained position.
L. prostratum. Deep blue, 3 to 4 inches high, flowering from April to October. Propagated by cuttings of previous year's growth.
L. prostratum (Heavenly Blue). A variety resembling the last, but with lovely sky-blue flowers.
L. purpureo-caruleum. A strong-growing variety of trailing habit with bright blue flowers at the ends of the sprays, flowering in May. Propagation by division, seed, or cuttings. This Lithospermum is the only one that does not object strongly to lime. Good for clothing a bank planted with bulbs.
L. Zollinzieri. Tufts of rough, glistening foliage and lovely sky-blue flowers in spring.

## LOBELIA-CARDINALIS, "Cardinal Flower."

 (Campanulaceæ.)Handsome plants with crimson-scarlet flowers and dark purple leaves, from 2 to 4 feet high; unfortunately not quite hardy, but so beautiful that it is worth taking a little trouble to grow them. If planted in May and June in a sunny, well-drained border with light soil, they may stand the winter, but require a great deal of moisture in the summer, therefore it is best to lift the crowns in October, and keep in cold frame during the winter. When propagating in spring, they can be divided into single crowns, and potted on like dahlias.
L. atroviolacea. Branching spikes of purple flowers.
L. coralina. Coral red, free-flowering.
L. Pink Bedder. Dwarf-branching habit, bright pink flowers.
L. Queen Victoria. Bright carmine, with foliage and stems of greenish purple, very tall.
L. syphilitica. Branching spikes of purple-blue.
L. " alba. White.
L. " Milleri. Rich purple.

Varieties of syphilitica are said to be hardy.

LUNARIA. (See Biennials, p. 13I.)

## LUPINUS, "Lupine." (N.O. Leguminosæ.)

L. arboreus. A lovely shrubby plant for the back of the border, liking a dry soil. It is hardy, but only lives three years, requiring to be renewed by seed or cuttings, and is deliciously scented. Flowering all the summer and again in October. Yellow flowers.
L. Snow Queen. A white variety of the above, growing 4 - to 6 feet.

Herbaceous lupins require rich deep soil. All the herbaceous lupins can be propagated by seed or division, and appreciate mulchings of rich manure. Seed-pods should not be allowed to

## ALPHABETICAL LIST OF PLANTS

form except where necessary for propagation, as in the case of nootkatensis.
L. Moerheimii. Rose-coloured flowers.
L. nootkatensis. Dark blue, very dwarf.
L. polyphyllus. A tall, purplish-blue plant flowering May to July, and with several varieties of white, blue and white, pink and yellow.

## LYCHNIS, "Campion." (N.O. Caryophyllaceæ.)

Handsome old border plants growing in any ordinary soil and liking a sunny situation. Propagation by division every other year, either in spring or autumn, also by seed or cuttings taken in late summer.
L. Chalcedonica. Commonly called the scarlet lychnis, and its flowers resemble a scarlet geranium. There are, however, white varieties and a double scarlet.
L. " dioica alba-plena. Charming border plants succeeding in any soil.
L. " rubra-plena. I to 2 feet high, and flowering June to August.
L. coronaria. (See Agrostemma.)
L. Flos-jovis. (See Agrostemma.)
L. haageana and its varicoloured hybrids, salmon, white, and red, $2 \frac{1}{2}$ feet high.
L. Viscaria alba-plena, rosea-plena. 2 feet high. White and rose-coloured flowers, blooming from May to July.

## LYTHRUM, " Purple Loosestrife." (N.O. Lythraceæ.)

Handsome plants for the back row of a border or for the waterside, 5 to 6 feet in height, easily increased by cuttings, liking rich and deep moist soil. The varieties worth growing are L. Salicaria, roseum superbum, bright rose colour, and $L$. virgatum, light rose colour.

## MACROTOMIA ECHIOIDES (or ARNEbIA ECHIOIDES), "Prophet Flower." (N.O. Boraginaceæ.)

Lemon-yellow with black blotches 6 to 12 inches high, flowering in April and May. An old hardy plant worth growing ; not particular as to soil, but apt to die out. Can be propagated by cuttings or seed.

MALVA MOSCHATA, " Musk Mallow." (N.O. Malvaceæ.)
Rose or white, $\mathrm{r} \frac{1}{2}$ to 2 feet, flowering in July and August. Propagated by seed or division. The white form of this is suitable for borders, and will flourish on chalk or gravel.
M. olbia. Pink, very graceful stems, 2 feet high ; July ; light warm soil.

## MECONOPSIS ACULEATA, "Himalayan Prickly Poppy."

Lovely pale blue, I to 2 feet; sandy soil and sunny, sheltered spot; sow seed in heat in March.

## MECONOPSIS CAMBRICA, "Welsh Poppy." (N.O. Papaveraceæ.)

Bright yellow with rough, light green leaves, growing I foot high, and a useful bright plant for poor, stony soil. The double varieties in yellow and orange are very handsome for the border and like a shady spot. Cultivation of the single kind by seed and the double by division in spring or seed.

> MECONOPSIS WALLICHI, "The Blue Satin Poppy." (N.O. Papaveraceæ.)

Growing 4 and 5 feet high and forming a branching pyramid, the upper part covered with lovely pale blue blossoms of large size some 2 inches across. If given a well-drained, sheltered position, it will stand the winter without injury. Propagated by seed.

## MELISSA OFFICINALIS, " Balm." (N.O. Labiatæ.)

Easily grown plants with fragrant foliage, growing 2 to 3 feet high in any soil or aspect. Propagated by division.

> MELITTIS MELISSOPHYLLUM, "Honey Balm." (N.O. Labiatæ.)

A native plant with large pink and white flowers, I to 2 feet high, thriving in any soil, and flowering in June. Division after flowering.

MERTENSIA, "Smooth Lungwort." (N.O. Boraginaceæ.)
Some of the most beautiful plants in cultivation, liking well-drained soil, sand, peat, and loam.
M. echioides. A vigorous dwarf plant with deep blue flowers from June to August. Propagated by division or seed.
M. sibirica. Pale blue flowers and glaucous foliage; very graceful stems with long, drooping clusters of bell-shaped

## ALPHABETICAL LIST OF PLANTS 263

flowers and bright, emerald-green leaves of glaucous habit ; more vigorous than $M$. virginica, the better-known kind. This plant is not easy to establish, preferring a shady, moist, and peaty nook. It will also succeed in rich kitchengarden soil with slight shade overhead. Its arching leaves and beautiful pale blue flowers make it worth taking some trouble about. Propagation by division in the autumn or early spring, and, as it dies down completely, its position should be marked. 18 inches to 2 feet high.
M. virginica (syn. pulmonariades). Closely resembling $M$. sibirica, and requiring the same treatment.

## MICHAUXIA CAMPANULOIDES, "Bellflower." (N.O. Campanulaceæ.)

White flowers tinged with purple; a tall, pyramidal plant flourishing in deep loam and commonly treated as a biennial, though it has been known to last three and four years. It is a stately plant for the border, of branching and slender habit, requiring deep porous soil. An uncertain grower, requiring a little shelter in the winter, which can be afforded by a sloping pane of glass to throw the rain off. Propagated by seed sown the year before and planted out in July.

## MIMULUS, " Monkey Flower." (N.O. Scrophulariaceæ.)

Showy border plants loving moisture and damp places, the best known being the common musk. If propagated by seed, which is very small, it must be scattered on the surface and very lightly covered with soil.
M. cardinalis. Orange-scarlet, flowering June to October, I to 2 feet high. Propagated from seed, cuttings, and division.
M. luteus. Bright yellow, flowering June to September. Propagated as above, and with many varieties, including cupreus and various hybrids.
M. moschatus (Musk). Bright yellow, 6 inches high, flowering from June to September. A sweet-scented old favourite, suited for wet and shady corners or for a stone edging in full sun.
M. Harrisonii. Has larger flowers than the type, but without its fragrance.

MONARDA, "Bergamot" or "Bee Balm." (N.O. Labiatæ.)
Handsome perennials, 2 to 3 feet high, growing in any soil and increased by frequent division in spring or autumn or by seeds. The new so-called scarlet variety is most effective in a border. The
whole plant gives out a delicious fragrance when touched or bruised, like eau-de-cologne, and is used largely for making that perfume at Grasse, in the south of France.
M. didyma alba. White.
M. ", (Cambridge scarlet). Crimson-scarlet.
M. " rubra. Crimson-red.

## MONTBRETIA, "Tritonia." (N.O. Irideæ.)

Hardy bulbs, 2 to 4 feet high, making a splendid display in the border in their brilliant orange and yellow colourings, the leaves being a vivid green, and rather like a gladiolus leaf. Any good garden soil well enriched will suit them, but not clay. Should grow in full sun on a well-drained, sheltered border to see them at their best. Plant the bulbs 3 inches apart and 3 inches deep. They grow well in suburban gardens under the shelter of walls. Some new and very beautiful varieties have recently been raised, the finest being Star of the East, with flowers 4 inches across, and at present at a prohibitive price.
M. crocosmaflora florepleno. Orange-scarlet, double ; a cross between the old Pottsii and crocosmia.
M. Ernest Davison. Orange-tinged carmine, very large.
M. Feu d'artifice. Yellow, with scarlet edges. Large flower.
M. Germania. Bright red, large flowers.
M. Hereward. Pale orange.
M. Le Pactole. Bright yellow.
M. Messidor. Straw colour.
M. Oriflamme. Orange-red, marone throat.
M. Prometheus. Brilliant orange and crimson.
M. Rayon d'Or. Fine yellow.
M. rosea. Rose-coloured flowers.
M. Star of the East. Immense yellow flower.

MORINA LONGIFOLIA, "Whorl-flower." (N.O. Dipsaceæ.)
A handsome perennial with spiny leaves like a thistle, but with spikes of four petalled flowers 2 to 3 feet high. They require shelter from high winds, and a little shade, sandy loam, and are propagated by seed or by division directly after flowering.

## MULGEDIUM. (See Lactuca.)

MUSCARI, "Grape Hyacinth." (N.O. Liliaceæ.)
Hardy bulbs with many varieties, perfectly hardy, and increasing rapidly in any soil or situation.

## ALPHABETICAL LIST OF PLANTS

M. armeniacum. Bright blue flowers 8 inches high, flowering in May.
M. botryoides. Blue and white, to inches high. Its white and pale blue varieties being extremely pretty.
M. comosum monstrosum. The Feather Hyacinth or plumosus, a lovely purple plume, 12 inches high, well worth growing in peat or sandy loam.
$M$. conicum. Of which the new form Heavenly Blue, of rich colour, is well worth growing, and is not such a rampant grower as the old variety.

## MYOSOTIDIUM NOBILE, "Giant Forget-me-not." (N.O. Boraginacer.)

A magnificent herbaceous plant with heads of large flowers, in colour and form resembling a forget-me-not, but four times the size. The large, heart-shaped leaves of brilliant, shining green, slightly crinkled, are extremely handsome. It grows in luxuriance on the peaty river banks at Mount Usher in Ireland, also in Cornwall, where it gets sea sand and dressings of seaweed, also in the cool soils of Cumberland, but it is impossible to establish on any hot, dry soil. Propagated by seed.

MYOSOTIS, "Forget-me-not." (N.O. Boraginaceæ.)
Beautiful plants for carpeting, mostly biennial, but some, such as dissitiflora and palustris and Traversii, perennials.
M. dissitiflora. Sky-blue, 6 to 9 inches high, flowering May and June. Seed or division.
M. palustris. The native water forget-me-not, sky-blue, 12 inches high, and requiring a moist position. This is easily propagated by seed, division, or cuttings. There are two or three forms, one white, one with larger flower than the type, and another called semperflorens flowering practically the whole summer ; and as it is largely used by Mr W. Robinson for carpeting beds at Gravetye, it evidently does not require so damp a situation as the type.

## NARCISSUS, "Daffodil." (N.O. Amaryllidaceæ.)

These bulbs, the hardiest and showiest of all spring flowers, have within the last few years so increased that it is difficult to cope with all the varieties. No soil comes amiss to them, and they increase so rapidly that it will be found advisable to lift the clumps from the border and replant every three or four years. They are excellent
to plant under a carpeting of forget-me-not, arabis or alyssum, and by using different varieties will brighten the border from March to the end of May. It is well to plant them as early as they can be obtained ; that is, from July to October, 3 to 4 inches deep on heavy soil, 6 to 8 inches deep on light soils, and 3 to 6 inches apart. This deep planting will protect them from frost, and ensure them a certain amount of moisture. In rich, heavy soil the bulbs become large and increase quickly; but in poor, dry soils they sometimes dwindle away until they almost lose their form.

## Trumpet Varieties.

N. cyclamineus. Yellow trumpet. Very early.
N. Emperor. Yellow trumpet. Primrose perianth. Very large.
N. Empress. Yellow trumpet. White perianth. Large and robust.
N. Glory of Leiden. Paler than Emperor and larger.
$N$. Horsfieldii. Yellow trumpet. White perianth. Early
N. Golden Spur. Long yellow trumpet. Early.
N. Mdm. de Graaff. White (creamy).
N. Obvalleris (Tenby). Yellow. Very early.

## Flat-flowered Varieties.

N. incomparabilis (Cynosure). Primrose. Orange cup.
$N$. $\quad$ (Sir Watkin). Sulphur. Yellow cup.
N. Leedsii (Mrs Langtry). Pure white.
$N$. ", (Duchess of Westminster). White. Canary cup. N. ornatus. White. Scarlet margin and cup. Fragrant. Very early.
$N$. Poeticus. White. Orange-red cup. Fragrant. Late.

## Doubles.

N. albo-pleno. Double white poet's narcissus. Fragrant. Very late.
$N$. incomparabilis. Yellow and orange. Strongly scented and varieties.
N. Telemonius. Old double daffodil. Yellow. Early.

> NEPETA, "Catmint." (N.O. Labiatæ.)

A plant of cool mauve and grey colouring, thriving in any light sandy soil, though not very fastidious in this respect. An oldfashioned flower which has been much used lately as a carpeting

## ALPHABETICAL LIST OF PLANTS

plant to beds of late tulips, as it remains in flower the whole summer.

It has a strong aromatic scent, and is easily propagated by cuttings or division.
N. macrantha. A tall-growing variety with blue-violet flowers, rather untidy in the border. Flowering in July and August. 2 to 3 feet high.
N. Mussini. Blue-violet, 12 to 15 inches high, flowering from May to October. A tidier plant than the preceding one, with grey-green foliage.
$N$. Trinity College. Flowering earlier than the type.
$N$. violacea. Light glaucous foliage and clouds of grey-blue flowers.
N. variegata. A pretty variegated form.

ENOTHERA, "Evening Primrose." (N.O. Onagraceæ.)
Very pretty hardy flowers, easily grown in any soil, and all blooming the first year from early seedlings. Lamarckiana, a tall-growing evening primrose, which only opens its flowers in the evening, will thrive even under dense fir trees, and may be met with growing wild in the pine-woods of France.

OE. grandiflora lamarckiana. Yellow flowers, 4 feet high, flowering in July and August, and opening in the evening. Propagated by seed. In most gardens this is treated as a biennial.
EF. eximia (or caspitosa or marginata). White, tinted with rose, and very fragrant ; I foot high, flowering June to September. Propagated by seed or divisions in early spring. This plant requires very good drainage and a sunny position in porous loam.
CE. glauca. Bright yellow, flowering June to August, about 2 feet high. Propagated by seed, cuttings, or division, and with a still better variety in Fraseri.
CE. M. Cuthbertson. Glossy yellow, double flowers, 2 feet high, June to September
OE. macrocarpa or missouriensis. Yellow, large flowers of trailing habit, I foot high, June to September.
EE. pumila or riparia. Yellow flowers, 6 inches high. A miniature variety.
EE. speciosa. Large white fragrant flowers, I foot high, flowering June to September. A fine species, objecting to heavy soil.
CE. taraxacifolia or acaulis. White flowers, 6 inches high.

A trailing, hardy kind, useful as a carpeting plant, liking light soil and propagated from seed.
OE. Youngei. Deep yellow, large-flowered, a better variety than fruticosa; I foot high, flowering from June to September. Both this and its double form like a damp place.

OMPHALODES, " Creeping Forget-me-not."
(N.O. Boraginaceæ.)

Free-growing trailing plants, liking partial shade and good, welldrained soil, sandy loam, or peat or leaf-mould, of which one variety, "Blue-eyed Mary," is found wild in the woods of Ireland and Wales.
O. verna (Blue-eyed Mary). Rich bright blue and bright green leaves, 6 inches high, flowering in April and May and easily propagated by division. In rich garden soil, this plant will grow and flourish.

## ONONIS, "Rest Harrow." (N.O. Leguminosæ.)

Good border or edging plants, free-flowering. Propagated by seed and division.
O. rotundifolia. Red crimson, 1 to 2 feet high, flowering from May to July. Propagated by seed or division.

## ONOSMA. (N.O. Boraginaceæ.)

Showy plants thriving well in good garden soil, the variety tauricum or Golden Drop having a great attraction for rabbits.
U. albo-roseum. White changing to rose, I foot high. A showy plant, liking deep cultivation and a free sandy loam, and should be planted in a sunny situation.
O. echioides (Golden Drop). Generally known as tauricum, a charming evergreen plant with drooping clusters of citron flowers. April to July. 8 to I 5 inches high. Propagated from seed or cuttings taken in the flowering season.

ORNITHOGALUM, "Star of Bethlehem." (N.O. Liliaceæ.)
Early summer bulbs. White star-shaped flowers with green stripes on the outside of petals. Good for shady places where other plants do not thrive, $O$. pyramidale and $O$. umbellatum being the best, about i foot high.

OROBUS, "Bitter Vetch." (N.O. Leguminosæ.)
Pea-like herbaceous plant, not of great importance, flowering in spring and early summer. Coarse feeders preferring sunny borders. Plant in spring or autumn. Propagate by division after three or four years or by seed. Protect the young shoots from birds.
O. vernus albus. White and blue, I foot.
O. auranticus. Orange, 3 feet.

## PÆONIA SILENSIS, "Chinese Double Pæonies." (N.O. Ranunculaceæ.)

A fine showy plant with beautiful foliage and sweetly scented flowers in white and all shades of pink to deep crimson, flowering in June and July. Any ordinary garden soil will suit them, but it should be well dug and manured before planting, and they prefer a west, south-west, or north-west aspect, and should be watered with weak manure water all summer.
P. Arethusa. Peach, white centre.
$P$. Couronne d'Or. Creamy-white, crimson-laced, golden anthers.
P. Marie Lemoine. Creamy-white, sweet scented.
$P$. nobilissima. Rose, very fine flower.

## PAPAVER, "Poppy." (N.O. Papaveraceæ.)

Hardy perennials of great value for the border, especially the oriental poppy with its many new varieties. They all like welldrained, deeply enriched soil with plenty of old stable manure well beneath surface, but are not particular as to aspect. They should be planted behind a later-flowering plant, as the decaying leaves are yellow and unsightly when the bloom is over.
P. alpinum. Resembling Iceland poppies in pale colours, yellow, white, orange ; 9 inches high ; require dry sandy loam or chalk and sunny border. Seed.
$P$. orientale. Noble flowers growing singly on stout stems, making handsome clumps for borders or massing. The old orange-red and bracteatum, dark crimson, are still among the best. The varieties include-
$P$. Beauty of Livermere. Nearly black.
P. Black Prince. Dark marone.
P. Blush Queen. Pale greyish pink.
P. Masterpiece. Pale greyish pink.
P. Mahoney. Dark crimson.
P. Medusa. Rose.

P. Mrs Amos Perry, Salmon-pink.<br>P. Marie Studholm. Salmon-pink.<br>P. Salmon Queen. Salmon-red.

These grow from 2 to 3 and 4 feet high and flower in May and June and occasionally in September. Propagated by division in early autumn or seed.
$P$. pilosum. Flowers rich red or orange, I to 2 feet high, having leaves and stalks flowering in summer and sometimes autumn. Division or seed.

PELARGONIUM, "Stork's Bill." (N.O. Geraniaceæ.)
Showy and handsome plants liking good soil, but not particular as to situation. Flowers rose-colour veined with dark shade, I to $\mathrm{I} \frac{1}{2}$ feet high, flowering in late summer. Likes well-drained, warm, and sunny corner, and sandy soil. Division or seed.

## PENTSTEMON, "Beard Tongue." (N.O. Scrophulariaceæ.)

Beautiful border plants, many of which are hardy if on welldrained soil raised above the level. They dislike alternate frost and wet, and should be planted in well-enriched, sandy loam in open, sunny situation and given plenty of water in summer.
$P$. pentstemon barbatus. Scarlet flowers in pendent bells, on long slender stalks, 2 to 4 feet high, and suitable for growing near the front of border on account of its graceful and delicate form. Flowers July and September. Division or seed.
P. cceruleus. I8 inches. Pale lilac. Flowering June and July.
P. glaber. 6 and 12 inches. Flowering June and August. With various shades of blue and mauve and several improved varieties such as Brandegeii and speciosus.
P. Hartwegii. The garden form which produces so many beautiful forms, none of which are hardy without a cold frame in winter. Cuttings should always be freshly made in autumn.

PETASITES (Syn. TUSSILAGO). (N.O. Compositæ.)
$P$. fragrans (the Winter Heliotrope). Fragrant heliotropescented flowers which appear during the winter months. A good plant for naturalising. Too coarse for most borders and not recommended.
$P$. japonica gigantea. A good variety for the wild garden, with very large foliage.

## ALPHABETICAL LIST OF PLANTS

## PHLOMIS, "Jerusalem Sage." (N.O. Labiatæ.)

A good plant for the mixed border, flowering in summer in any soil or situation. Propagated by seed or division.
$P$. fruticosa (syn. canariensis). A plant of neat bushy habit, bearing yellow flowers and woolly foliage, 3 to 4 feet.
$P$. tuberosa. Purple rose, hoary foliage, 3 feet.
$P$.viscosa (syn. Russelliana). Golden-yellow flowers in whorls, a very effective variety, I to 2 feet.

## PHLOX, "Flame-flower." (N.O. Polemoniaceæ.)

The name flame is descriptive of the general brilliancy of the flowers, a genus with twenty-seven species of different kinds, natives of North America and Russian Asia.

Suffruticosa and decussata, the early and late tall-flowering, are suitable for the herbaceous border. Any good border will suit them, but they do best on rich, heavy soil and in partial shade. They will not succeed on a hot, dry soil in full sun. They are highly attractive and easy of cultivation, and a succession can be kept up all summer and autumn with the early- and late-flowering kinds. They require plenty of water, and like a mulching of manure, and division every two years.

Propagation by seed, sown as soon as ripe in pans of sandy loam and kept in a greenhouse till spring, when the young plants will appear. They should be grown on and planted out in May, and will sometimes flower the first season. This method is only employed to raise new varieties. The more general is by division in spring, or by cuttings taken either in spring from the shoots springing from the base, or in late summer from the side shoots growing up the stems.
$P$. suffruticosa, or early-flowering dwarf phloxes, June and July.
P. Attraction. White and mauve, large head.
$P$. Cybele. Silvery lilac, large.
P. Cleopatra. Rosy crimson.
P. Harry Veitch. Creamy white, deep pink edge.
P. Isaac House. Pink.
P. Mrs Miller. Rose-pink.
P. John Turnbull. Salmon with crimson edge.
P. Mrs James Robertson. Mauve and purple edge.
P. Snowflake. White.
P. The Shah. Rosy purple.
$P$. White Swan. White.
P. Mrs Greig. Mauve.

Short List of Phlox decussata flowering in late July, August, and September.
P. Aviation. Rosy salmon, 2 feet.

Beranger. Salmon-pink, 2 feet.
coccinea. Fiery red, 4 feet.
Comtesse de Jarnac. White-tinged mauve, handsome variegated foliage.
Coquelicot. Salmon-scarlet, crimson edge, 2 feet.
Dr Charcot. Lavender-mauve, 2 feet.
Eclaireur. Bright rose, $2 \frac{1}{2}$ feet.
Eugène Danzaniers. Lilac, $2 \frac{1}{2}$ feet.
flambeau. Strawberry-red, 2 feet.
G. A. Strohlein. Salmon-scarlet, crimson edge, 3 feet, better than Coquelicot.
Elizabeth Campbell. Salmon-pink.
Gen. Chanzy. Fiery red, 3 feet.
Gruppen königen. Rose-pink, 3 feet.
Iris. Violet, $2 \frac{1}{2}$ feet.
Javanaise. Bluish lilac, 3 feet.
John Forbes. Mauve, 3 feet.
Jules Cambon. Rose, 2 feet.
la Fiancée. $2 \frac{1}{2}$ feet.
le Mohdi. Purple, $3 \frac{1}{2}$ feet.
Lord Kelvin. Deep lake, $2 \frac{1}{2}$ feet.
Lord Rayleigh. Violet, $2 \frac{1}{2}$ feet.
Madame Carvalho. White and pink, 2 feet.
Madame Paul Dutrie. Cattleya-pink, $2 \frac{1}{2}$ feet.
Miss Wilmott. Pale grey.
Mrs Oliver. Salmon-pink, $2 \frac{1}{2}$ feet, very like E. Campbell.
Obergartner Mack. Rose-red, 3 feet.
Panama. White, $\mathrm{I}_{2}^{1}$ feet.
Panthéon. Salmon-pink, $2 \frac{1}{2}$ feet.
Reichsgraf von Hochberg. Dark marone-red, $3 \frac{1}{2}$ feet.
Roi des Roses. Salmon-rose, 3 feet.
Selma. Pink-crimson edge, 3 feet.
Suffrage. Salmon-pink, 2 feet.
W. Ramsay. Rich purple, $2 \frac{1}{2}$ feet.

## PHLOX, "Dwarf Alpine." (N.O. Polemoniaceæ.)

A beautiful edging plant for beds or borders.
$P$. amœena. Bright pink flowers in large clusters, flowering very early.
P. divaricata, syn. Canadense. Pale blue.
P. divaricata alba grandifora. White.
B. " (Perry's variety). Lovely pale blue.
P. subulata (American Moss Pink), flowering in spring.
$P$. " (B. E. C. Chambers). A new variety with mauveblue flowers.
P. " (Daisy Hill). A strong-growing variety, rich rose colour, with crimson centre.
$P$. " (Vivid). Fiery rose with carmine centre.

## PHYSALIS, "Winter Cherry." (N.O. Solanacex.)

Showy plants in late autumn for the border, with very effective scarlet seed-pods like Japanese lanterns. Hardy in light soil and sunny places. A gross feeder, and requiring annual division. Seed or division.
P. Bunyardi. A good variety, very free fruiting.
P. Franchetti. Whitish flowers, bright coral-red with calyx of large size.

## PIMPINELLA SAXIFRAGA, "Common Burnet Saxifrage."

Pink summer-flowering plant of recent introduction. Propagated by division.

PLATYCODON, "Chinese Bell-flower." (N.O. Campanulaceæ.)
Useful border plants with large flowers that resemble campanulas; well-drained and sunny places and enriched sandy loam required.
P. grandiflorum. Deep blue flowers and handsome spikes.
$P$. album. Pearly white, 18 inches to 2 feet. Propagated root-cuttings or seed.
$P$ Mariesii. Deep blue flowers with straight stems, dwarf, a charming variety.
$P$. Major. Deep blue flowers, a strong-growing variety.

PLUMBAGO LARPENTA, "Lead-wort." (Plumbaginaceæ.)
A beautiful perennial with cobalt-blue, forget-me-not-like flowers and leaves that turn bright red while flowers are in bloom from September to December. A most uncommon combination, 9 to 12 inches high. Happy in any soil if it can get the sun and good drainage. Propagation by division.

## POLEMONIUM, "Jacob's Ladder." (Polemoniaceæ.)

Lavender-blue flowered plants, with pretty, fern-like foliage, 2 feet high, flowering in May and June. Likes rich deep soil in either sun or shade. Seed or division with a white form that has variegated leaves.

## POLYGONATUM, "Solomon's Seal." (Liliaceæ.)

A handsome plant with a graceful habit of growth and white and green bells pendent from an arching stem with light green leaves, 2 to 4 feet high, flowering in May and June. Prefers a damp, shady place with moist loam and leaf-mould and a little sand. Propagated by division.

## POTENTILLA, "Cinquefoil." (N.O. Rosaceæ.)

A good plant for the border, requiring light loamy but deeply worked soil. Will succeed in any exposed situations, growing 18 inches to 2 feet high, and requiring staking, the double varieties being the most showy. Propagation by division or seed, the following being some of the best varieties:-
P. atrosanguinea (Gibson's Scarlet). New, bright scarlet, a
$\quad$ free-flowering and effective variety.
P. Etna. Scarlet double.
P. Miss Willmott. Clear, rose-pink, single flowers, very good.
P. Wm. Robinson. Scarlet, shaded orange.
P. Gold Dust. Yellow, double.

PRIMULA (Hardy Alpine Species). (N.O. Primulaceæ.)
A very handsome and hardy plant for the border, 6 to 12 inches high, liking a cool, moist, and shady situation, but with drainage, or the crowns will damp off in the winter. Any garden loam, but preferably enriched with leaf-mould. Propagation by seed or by division immediately after flowering, except in the case of Primula Sieboldi. The common yellow primrose has now many other colours-pink, mauve, white, crimson, purple, and the blue "Wilson" variety.
$P$. auricula. In many colourings of yellow, crimson, brown, and green, much grown under frames for showing, but quite hardy in any cottage garden ; needing shade, and division in spring with top-dressings of leaf-mould.
$P$. capitata. Round heads of mauve and purple, 9 to 12 inches high, flowering August and September. Prefers a rockery border sheltered from midday sun.
$P$. denticulata. 12 to 18 inches. Lilac, flowering April and May.
P.japonica. 12 to 18 inches. White pink, crimson, flowering May and June. A good hardy plant which insists on rich, deep loam and half shade, and will seed itself freely.
P. rosea grandifiora. 6 to 12 inches. Bright rose, flowering April and May. Likes a peaty, moist place and shade.
$P$. sikkimensis. 12 to 18 inches. Sulphur-coloured, quite hardy. Likes boggy soil and north aspect if with good drainage.
P. polyanthus. In all colours with many heads of flowers on one stalk, requiring same cultivation as ordinary primroses, namely, cool soil, half shade, and division after flowering. Bunch primroses are an improved and larger variety, with long stalk and bigger heads, with orange, white, or yellow flowers, much used for spring bedding.

## PULMONARIA, "Lungwort." (N.O. Boraginaceæ.)

Spring-flowering plants 6 to 18 inches high, foliage mostly speckled with white. Any soil or situation, but they like moisture.
$P$. angustifolia. Blue and crimson flowers known as soldiers and sailors, or Joseph's Coat.
$P$. saccharata, syn. avernensis. Dark blue flowers, also white and other colours.

## PYRETHRUMS. (N.O. Compositæ.)

Excellent hardy plants, flowering in spring and early summer, in shades of pink, crimson, and white, single and double, the flowers being useful for cutting. They will do well in any ordinary garden soil, but a rich loam suits them best. The soil should be well dug and manured before planting, and they must be staked, early. Propagated by division or seed.

They may be transplanted in April to prolong flowering season, and are not particular as to aspect. I to 2 feet high.

Many new varieties have lately been added, Queen Mary, light pink, being one of the best doubles, with Queen Alexandra, white. The single forms are more graceful and not so heavy in the head,
and include Langport, scarlet, Gloire de Nancy, pink, Pinkie, and Queen of the Whites.
P. uliginosum (syn. Chrysanth. ulig.). Large, white, daisylike flowers with long petals and greenish centres, in clusters on tall stalks with light green leaves. Flowering September, October, and November. Very effective and useful late plant. A gross feeder, and needs regular dividing. 6 to 8 feet high. Any soil or aspect.

## RANUNCULUS, " Buttercup." (N.O. Ranunculaceæ.)

Excellent plants for the border, of easy cultivation, which do well in either a sunny or partially shaded position, and like a moist soil. From I to 3 feet. Division or seed.
R. aconitifolius. White single flowers, florepleno, beautiful double, known as "Fair Maids of France."
$R$. acris $f$ l. pl. Double yellow.
R. amplexicaulis. Large white flowers, glaucous-grey foliage.

> ROMNEYA, "Californian Tree Poppy."
> (N.O. Papaveraceæ.)

A charming plant or shrub with pure white flowers and goldenyellow stamens and deeply cut, glaucous green leaves. Hardy on warm border or near wall, liking old mortar-rubble at its roots, and resenting disturbance. Sandy or peaty loam and sunny aspect. Propagated from seed. Cannot be easily moved, and should be planted out from small pots in April.

> RUDBECKIA, "Cone-flower." (N.O. Compositæ.)

Beautiful and showy border plants, useful for cutting, and not particular as to soil or aspect, if soil is well enriched. Propagated by division. In varying heights, and presenting a compact mass of colour in the border.
R. Autumn Glory. Bright yellow with brown, cone-like centre. 5 feet. September and October.
R. californica. Resembling the last, but 3 to 4 feet high, and flowering summer and autumn.
R. Golden Glow. Bright yellow double. $5 \frac{1}{2}$ feet. September.
R. purpurea. Dull crimson purple. Curious rather than attractive.
R. speciosa or Neromani. Bright yellow, black disc in centre. 2 feet. Masses well and does not mind shade.

## SALVIA, "Sage." (N.O. Labiatæ.)

Plants of widely diverse form and habit and with over eighty varieties, many of them hardy, but all liking deep, rich, and welldrained soil and full sun. The colour is usually shown in the bracts the flowers being insignificant.
S. argentea. Silvery-leaved plant of noble form, and with white woolly surface. Best grown for foliage only, and flowerstems pinched out. Likes well-drained, sandy soil, and is propagated by seed.
S. azurea. Blue, 4 feet high. August and September. On slender stems clothed stiffly all the way with narrow, darkgreen leaves. Its improved form, Pitcheri or grandiflora, flowers September and October, and is of a fine cobalt blue. Apt to be cut off by frosts before it has reached its best. Likes well-drained soil and sunny situation.
S. glutinosa. Hardy yellow variety with viscous, greyish foliage, of poor form and colour. Any soil and aspect. I 8 inches to 2 feet.
S. Tenori. Handsome violet or dark blue, branching habit. 18 inches to 2 feet. Crinkled, dark green leaves. June, July. Hardy.
S. patens. Brilliant cobalt-blue, 2 feet. Most valuable plant for warm, well-drained soil in good climate-otherwise best kept in frames for winter.
S. Sclarea. Mauve with large pinkish bracts and pale blue tubular flowers. 3 to 6 feet high, with crinkled greyish leaves. Large and handsome, with a pungent, aromatic scent. Valuable plant for large border, as it lasts a long time in good condition owing to the branching stems of highly coloured bracts which turn silvery white after four or five weeks. Propagated by seed, a little of which should be sown each year, or cuttings. Generally known by a poor form not worth growing. Any rich soil and aspect. S. virgata nemorosa. A handsome border plant recently much in favour. Fine branching heads of rich purple with reddish-brown stems and bracts, and very effective. 2 feet high. June and July. Cuttings or seed.

SANTOLINA, "French or Cotton Lavender."
(N.O. Compositæ.)

Shrubby plants useful as border plants or for low-growing mass of grey as a break in colour. Should be kept clipped, the yellow flower being uninteresting.
S. incana. Low-growing dwarf variety, an improvement on the type. 6 inches. Any light soil or aspect. Propagated by bits pulled off and planted.

## SAPONARIA, "Soapwort." (N.O. Caryophyllaceæ.)

Lilac-pink, $\mathrm{I} \frac{1}{2}$ feet, July and September. Grows rampantly anywhere. Propagated by division. The double form is the better, and there is also a deep pink. Sweetly scented oldfashioned plant.
SAXIFRAGA, "Rockfoil." (N.O. Saxifragaceæ.)

A large family, of which the two following are most suited for the border.
S.megasea, syn. cordifolia. Very handsome and early-flowering plants with beautiful, shining evergreen foliage, turning red in winter, suitable for massing. Flowers of stiff massive type, light pink or red, 9 to 12 inches high, flowering April and May. Any soil and quite hardy, but to flower well should be planted in full sun in welldrained soil, but supplied with water in summer. Divide when it is wished to increase, otherwise do not disturb.
S. umbrosa (London Pride). Dainty pink and white flowers. I2 inches. Useful for cutting, and as a front-row plant of easy culture. Division. Flowers May.

SCABIOSA, "Pincushion-flower." (N.O. Dipsaceæ.)
Handsome and hardy plants for the border, flowering summer and autumn. Division or seed.
S. caucasica. Lovely lilac-blue. Heads of flower 2 to 3 feet. Requires a sunny, well-drained border and is rather an unreliable grower, doing best from seed, but not always succeeding in cold, wet soils. Likes the near neighbourhood of a wall and deep cultivation. Propagate by division or seed.
$S$. lutea. Pale yellow, hardy, and easily grown. 5 feet. August, September.
S. lutea gigantea. Pale yellow, hardy. 8 feet high. Rich soil, any aspect. Division or seed.

## ALPHABETICAL LIST OF PLANTS

## SCILLA, "Squill." (N.O. Liliaceæ.)

Dwarf bulbs, 3 to 12 inches. Spring and autumn.
S. campanulata. Lavender-blue, white and fresh, very like our common bluebell. May. Bulbs like very deep soil, with leaf-mould and a little sand, but will thrive almost anywhere if drainage is good.
S. sibirica. Deep blue. February.

## SEDUM SPECTABILE. (N.O. Crassulaceæ.)

Pale pink and deep pink heads of flowers with pale, glaucousgreen foliage. 12 and 18 inches high. Useful for massing or borders. August and September. Any soil or situation, though it does best in full sun. Propagate by division or seed.

SENECIO, "Leopard's Bane." (N.O. Compositæ.)
Coarse-growing plants with large foliage and, with one or two exceptions, only fitted for wild gardening or massed in shrubberies sheltered from wind.
S. Doronicum. Orange yellow, I foot to $\mathrm{I} \frac{1}{2}$ feet high. Good for massing or cutting. June and July. Quite hardy and of easy culture in sandy loam. Division.
S. pulcher. Beautiful rosy purple 18 inches to 2 feet high. Large flowers in branching heads on single stem. Valuable on account of its late flowering. September till frosts. Rich deep loam or sandy loam deeply cultivated. Propagate by root-cuttings I to 4 inches later in spring and planted in shallow boxes of sandy soil.

## SIDALCEA, "Poppy Mallow." (N.O. Malvaceæ.)

Hardy border plants of easy cultivation not particular as to soil or aspect. Very free growing, and requiring constant redivision to prevent encroachment.
S. alba. Flower white, 3 feet, and useful for cutting. July and August.
S. Listeri. Pale pink, fringed flowers, tall and graceful.
S. altropurpurea. Purple.
S. James Dickson. Rose.

## SILENE, "Catchfly." (N.O. Caryophyllaceæ.)

Low-growing plants generally suitable for massing on rockeries. Of easy culture, and pink-rose or white, liking sandy soil. Two tallgrowing varieties suitable for the border are :
S. Fortunei. Pale pink, 2 to 3 feet, flowering July and September. Flowers much fringed and good for massing. Division.
S. virginica. Crimson-scarlet, I to $\mathrm{I} \frac{1}{2}$ feet, flowering June and July. Requires a well-drained border, preferably raised, as it does not like damp, and good deep loam.

## SOLIDAGO, "Golden Rod." (N.O. Composite.)

Hardy plants of easy cultivation without preferences as to soil or aspect. Greedy feeders, soon exhausting the soil and requiring a good deal of manure and constant division. The tall varieties are best for wild-garden effects. Propagated by division.
S. Shortii. Bright yellow, 2 to 3 feet, flowering September and October.
S. Virgaurea nana. Yellow, $1 \frac{1}{2}$ to 2 feet, July and August. A good dwarf variety.

## SPIRÆA. (N.O. Rosaceæ.)

A splendid race of plants for borders where partial shade and moisture and deeply cultivated soil can be obtained. Many are very large, but all are easy of culture and do not object even to a due north aspect or a town garden.
S. Aruncus (Goat's Beard). White, in handsome plumes, 3 to 5 feet high, suitable for back of border or groups. June and July. Best left undisturbed three or four years. Propagated by division.
S. astilboides. White, with graceful, drooping plumes, and handsome leaves. 2 feet. June to September. Division.
S. Filipendula $f$. pl. Whitish flowers, I to $\mathrm{I} \frac{1}{2}$ feet high, flowering in June and July. Should be massed together for effect. Any soil or situation.
S. lobata. Deep crimson, 2 to 3 feet, very showy, July to September, liking damp and shady places.
S. palmata. Crimson, $1 \frac{1}{2}$ to 2 feet, July and August. Also a white and pale pink. Should be grown in every border, and in rich, deep loam and half shade. Division.
S. Ulmaria (Wild Meadow-Sweet). White, very fragrant, 2 to 5 feet, June to August. Division or seed. Good in poor soil, as in wet, damp soil it grows too big.
S. Ulmaria fl. pl. Dwarf double variety of above.

## ALPHABETICAL LIST OF PLANTS

## STACHYS, "Woundwort." (N.O. Labiatæ.)

Woolly-leaved plants used for edging. When the flower-heads are picked off the silvery-grey leaves are very effective for massing. Any soil. Propagated by division or cuttings. Sometimes called Lamb's Tongue. A scarlet-flowered variety has been recently introduced, but is said to be tender.

STATICE, "Sea Lavender." (N.O. Plumbaginaceæ.)
Useful plants for full sun and liking good light garden soil with a dressing of old stable manure yearly. The large-branching heads are useful for winter decoration, as they dry well. Propagation by seed and division.
S. eximia superba. Lilac, I foot high, June and August.
S. Gmelini or elata. Blue, 2 to 3 feet, July.
S. latifolia. Lavender-blue, I to $2 \frac{1}{2}$ feet, any soil.
S. Limonium. Lavender-blue, $2 \frac{1}{2}$ feet, July and August, liking a stiffish loam. Also in pink and white varieties. Not so hardy as S. latifolia. There are also mixed hybrids in all colours, yellow, white, blue, and red, flowering in August and September.

STERNBERGIA, "Lily of the Field." (N.O. Amaryllidaceæ.)
Sulphur-yellow, flowering in autumn, about 6 inches high. These bulbs like a good deep sandy loam, and like a little protection in winter. Propagate by offsets.
STOKESIA, "Cyanea." (N.O. Compositæ.)

Blue flowers like an aster, 3 inches across, flowering September and October, 2 feet high. Only possible to cultivate on warm, sandy loam and in good climate. Often injured by frost before blooms expand in low-lying districts.

## THALICTRUM, " Meadow Rue." (N.O. Ranunculaceæ.)

Charming border plants not used enough, growing in any soil or aspect, and propagated by division in April or seed. Same in March.
T. angustifolium. Cream, tall, graceful plant, 6 feet, June and July.
T. aquilegifolium. Pale yellow, lilac, or pink feathery heads of flowers, and beautifully cut and ornamental foliage, 3 feet, May and June.
T. Delavayi. Pale lilac, blue-green foliage, 2 feet, June and July. Slender and graceful.
T. glaucum. Yellow, 6 feet, fine plant for back row, from July. A new variety called dipterocarpum is said to be very fine, with large heads of purple flowers, 4 to 5 feet.

## THERMOPSIS, "Lupinewort." (N.O. Leguminosæ.)

Hardy perennials flowering late spring and summer, of lupinlike character, and with good foliage of dark green. Ordinary soil with old stable manure dug deeply in and a little grit or sand. Propagate by seed.
T. barbata. Deep purple, I foot.
T. caroliniana. Yellow, 5 to 6 feet high.
T. montana. Yellow, 2 feet (hot, dry soils).

## TRADESCANTIA, "Spider-wort." (N.O. Commelinaceæ.)

Old-fashioned plants worth growing and most easy of culture, even succeeding in town if soil is not too wet. Curious three-petalled flowers with smooth, dark-green leaves like bulb foliage somewhat. 18 inches, flowering all summer, and propagated by division. White, dark blue, pale blue, mauve, red-purple, and rose colour.

TRITOMA (Syn. Kniphofia), "Torch Lily," "Red-Hot Poker." (N.O. Liliaceæ.)

Handsome herbaceous plants of most striking appearance, with tall spikes of scarlet and orange, flowers in summer and autumn. Though fairly hardy they need a favourable climate to see them at their best. Still they are sufficiently accommodating if on welldrained soil, and will even thrive in town gardens. On cold soil they need a little protection such as ashes over their roots in winter, and though they like a sandy loam they need good supplies of manure best applied as a top-dressing at beginning of summer, and are gross feeders. Propagated by division, and look their best when grown in two or three large clumps together.
T. aloides or Uvaria. Coral-red or orange, 4 to 5 feet high. The only perfectly hardy variety in this country which, together with its several forms, such as grandis, nobilis, and Saundersi, flower from July to October.
T. caulescens. Salmon-red, blue-grey leaves, 4 to 5 feet.
T. Chlois. Old gold, 2 to 3 feet, August and September.
T. Cloto. Crimson-scarlet, 3 feet, August to October.

## ALPHABETICAL LIST OF PLANTS

T. Corallina. Coral-scarlet, 2 feet, July and August.
T. Leichtlinii aurantiaca. Orange and yellow, 2 feet, August.
T. Lemon Queen. Lemon-yellow, $2 \frac{1}{2}$ feet, August and September.
T. Macowanii. Coral-red, 2 feet. Free flowering.
T. Ophir. Orange-yellow.
T. Tuckii. Greenish yellow and red. June.

TROLLIUS, "Globe-flower." (N.O. Ranunculaceæ.)
Handsome plants for border, with good foliage and fine globular heads of flowers. Either half shade or sun suits them, but they like moisture. Therefore deep cultivation should be given them, and they revel in a clayey subsoil with good fresh loam, decayed stable manure, and leaf-mould. Propagation by division. If seed is sown it takes a year to germinate.
T. asiaticus $\not$ f. pl. (syn. japonicus fl. pl. and Fortunei fl. pl.). Bright orange with red stamens, some double. 2 feet high. Flowering April, and again in August.
T. caucasicus. Orange globe, 2 feet.
T. europaus. Pale yellow, $2 \frac{1}{2}$ feet.
T. albiflorus. A new variety, 9 inches, with creamy-white flowers.

## TULIPA, "Tulip." (N.O. Liliaceæ.)

Spring-flowering bulbs of which the May-flowering such as Darwin and Cottage tulips are the most suitable for borders. T. gesneriana in good soil will flower undisturbed for some years. The others are better lifted after flowering, and either replanted at once in fresh soil in the border and after the small bulbs have been separated from them, or dried off carefully and replanted in October. Clara Butt, pink ; Hobbema, pink ; La Merveille, orange; Picotee, white, pink edge ; Mrs Moore, yellow, are all good.

## VERA'TRUM, "False Hellebore." (N.O. Liliaceæ.)

A small genus of plants remarkable for the elegance of their branching racemes of inflorescence and the unique form of their leaves. It must not be confounded with the Christmas or Lenten rose family, and its leaves when dried and ground yield the poisonous hellebore powder sold to kill caterpillars and other insects.

These veratrums are good background plants, and useful for subtropical effects, also for naturalising in shrubberies, and require
rich deep loam; though, if drainage is good and the soil free, they are not difficult anywhere, and are propagated by division and seed, the latter requiring to be sown immediately after flowering. The flowers are greenish white or dull purple, and yet it is very effective, californicum especially.
$V$. album. Greenish white, 3 to 4 feet high, flowering July and August.
V. californicum. White, 6 feet high, flowering June to August, a comparatively new and beautiful variety.
V. nigrum. Blackish purple, 5 feet high, flowering June and August.

## VERBASCUM, " Mullein." (N.O. Scrophulariaceæ.)

Tall handsome plants for an isolated position, and for this used in paved gardens; of woolly-greyish leaves and insignificant flowers. Must have well-drained, sunny place, of easy culture ; propagated by seed, and sometimes division.
$V$. Chaixi. Yellow, branching habit, 5 to 9 feet.
$V$. " album. White, branching habit, June to September.
V. caledonia. Sulphur-yellow and brown, 3 and 4 feet, June to September.
V. phoniceum. Purple, crimson, lilac, white; 3 feet high, June and September.
V. Ivanhoe. A new yellow variety, very showy.

VERONICA, "Speedwell." (N.O. Scrophulariaceæ.)
Good blue flowers in varying heights and shades, all easily grown and most useful. Border plants propagated by division, liking good soil enriched by old stable manure.
$V$. amethystina. Rich bright blue, I to 2 feet, June and July.
$V$. gentianoides. Greyish white, 6 inches, May and June.
$V$. incana. Rich blue-violet, 2 feet, July and September.
$V$. longifolia. Violet, 3 feet, July and September. Also in rose and white.
V. spicata. Bright blue, 18 inches to 2 feet, June to August.
$V$. " alba. Bright blue, 18 inches to 2 feet, June to August.
$V$. repens. Blue, a carpeting plant for edge of border.
VINCA, "Periwinkle." (N.O. Apocynaceæ.)
Useful plants for carpeting poor, shady places where not much else will grow, and with evergreen foliage. Propagated by cutting

## ALPHABETICAL LIST OF PLANTS

or division, and can be had in lavender, in small- and large-leaved varieties, white, crimson, and double mauve, and with variegated leaves.

## VIOLAS. (N.O. Violaceæ.)

Useful carpeting or edging plants for any soil or aspect, propagated by cuttings, division, or seed, and of tufted habit of root growth. Pansies need a cool rich soil, and are raised from seed or cuttings.

White. Peace, Palmer's White, White Beauty (late).
Cream. Sylvia, Pencaitland.
Yellow. Klondyke, Royal Sovereign, Mrs E. A. Cade, Bullion.
Blue shades. Royal Scot (purple), Blue Bell (violet), Blue Duchess (violet), Florizel (lilac).
Mauve. Wm. Neil, Lilacina (violet-purple), Maggie Mott (early).
Purple. Jubilee, Edina (late).
Fancy. Blue Cloud.
9
" Gown (blue-violet)
Pansies.

Hugh Mitchell.
Archie Milroy. Holroyd Paul.
Hall Robertson.
Robert M‘Caughie.
James M'Nab. Mrs R. P. Butler.
John Picken.
Mrs Ireland.

Mrs James Smith.
Mrs Campbell.
Neil M‘Kay.
Mrs H. Stewart.
Miss Neil.
Miss A. Douglas.
Margaret Fife.
Thos. Stevenson.
Rev. D. R. Williamson.

> YUCCA, "Adam's Needle." (Liliaceæ.)

Splendid plants for borders, so distinct in habit. Tall, spiky leaves of blue-green, and great spires of white flowers. Liking welldrained soil, warm aspect, and rich root-run. Division, root cuttings, and seed.
Y. filamentosa. 3 to 6 feet, bells of greenish-white flowers, July to September.
Y. gloriosa. 4 to 7 feet, creamy white, July to September.

## ZAUSCHNERIA CALIFORNICA. (N.O. Onagraceæ.)

Scarlet flowers 9 to 12 inches high with greyish foliage. An attractive plant for edge of raised border. Must have sunny welldrained position. Division, seed, or cuttings struck in spring.
Z. splendens. A better grower, but not so bright.

## LIST OF ANNUALS

| Annuals. | Colour. | When to Sow. | Where, | Flowering Period. | Height. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Atriplex hortensis rubra | Foliagedark red All colours | March. | Open ground. | Aug. to Sept. June to Oct. | 6 to 10 ft . 12 in . to $2 \frac{1}{2} \mathrm{ft}$. |
| Antirrhinum (t |  | Feb. |  |  |  |
| short). |  | Aug. | Under glass; open ground for following year. Under glass. |  |  |
| Aster (China) | Mauve. | End of March. Feb. |  | Aug. and Sept. June to Sept. | 12 to I8 in. 6 in. |
|  |  |  | Under glass. |  |  |
| Brachycome |  |  |  |  |  |
| Calendula <br> Candytuft | Orange. Crimson, lilac, white. Blue. | April. | Open ground. <br> " |  | I8 in. 12 in. |
|  |  |  |  |  |  |
| Convolvulus |  | March. | ", | May to Oct. |  |
| Coreopsis | Yellow. | April. | " | June to Oct. | 2 ft . |
| Cosmos | Pink, white, crimson. | Feb. | Under glass. | Aug. to Oct. | 4 to 5 ft . |
| Delphinium | Bright blue.$\square$ | March. | Open ground. | July to Aug. | $\cdots$ |
| ,, Blue Butterfly |  | April. |  |  | 12 in. |
| Dimorphotheteca | Orange. | March. | Glass. <br> Open ground. | Sept. June to Sept. | $9 \mathrm{in}$. |
| Eschscholzia | Orange, rose. | April. April. | Open ground. <br> ", | June to Oct. | 12 in. |
| Gaillardia | Orange, yellow. Crimson. White. Rose. White. | " |  | July to Aug. | 18 in. |
|  |  |  |  | June to Oct. |  |
| Godetia Duchess of Albany Crimson Glow . Gypsophila |  |  |  | ," | 12 in. |
|  |  | ", | ,", | ", |  |
|  |  | Märch. | Open ${ }^{\prime \prime}$ | June" and | $18^{\prime \prime} \mathrm{in}$. |
|  | Yellow, lemon, white. All colours. |  | ... | July to Oct. | 5 to Io ft . |
| Helianthus (Sunfower) |  |  |  |  |  |
| Hollyhock |  |  | Glass. | Aug. and Sept. | 8 ft . |
| Larkspur (tall, branching). | Rosescarlet, white, mauve, dark blue. | " | " | Aug. to Oct. | 3 ft . |

List of Annuals-continued.

| Annuals. | Colour. | When to Sow. | Where. | Flowering Period. | Height. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lavatera trimestris (Mallow). | Rose, white. | March. | Open ground. | June to Sept. |  |
| Linaria bipartita splendida. | Purple. | " | , | June to | 12 in. |
| Lupins . | Light blue, | April. |  | June, July and | $2 \frac{1}{2} \mathrm{ft}$. |
|  | white, yellow, | March. | Glass, | July, and Aug. |  |
| Marigold, African | Lemon, orange. | " | " | Aug. to Sept. Oct. | $1{ }_{1} \frac{1}{2}$ to 2 ft . |
| , French | Brown, yellow. | " | " | ", | 12 in. |
| Matthiola, Nightscented Stock. | Grey. | " | Open ground. | Aug. and Sept. | 12 in. |
| Mignonette . | Yellow, white. | " | " | June to Oct. | 12 in . |
| Victoria - . | Crimson. | " | " | " | 8 in. |
| Golden Queen. | Yellow. | ", | ," | ", |  |
| Nasturtium, Empress of India. | Crimson, blue-green leaves, scarlet, yellow, salmon and apricot | " | ", | ", | - |
| Climbing | shades. Crimson, blue-green leaves. | " | " | " |  |
| Nemesia, Blue Gem | Sky-blue. | Feb. | Under glass. | " | 9 in. |
| ,, Strumosa | Orange, pink and | " | " | ," | 9 in . |
| Pentstemons, largeflowered, mixed. <br> ,, Glaber | salmon. Coral, crimson, purple. Blue. | " | " | " | 2 ft $18 \mathrm{ft}$. |
| Petunia . | All <br> colours. | " |  | " | 18 in . |
| Poppy, Carnation. flowered, double. | Pink, red, and white. | March. | Open ground. | July. | 2 ft . |
| Shirley <br> White Swan | ,", | "," | ", | ", |  |
| Salpiglossis. | Purple, gold and blue. |  | Under 'glass. | ", |  |

LISt of Annuals-continued.


## LIST OF BLUE FLOWERS IN PURE TONES

Auchusa, in variety.
Aconitum volubile and Wilsonii.
Borago laxiflora.
Catananche.
Centaurea.
Chicory (wild).
Commelina.
Delphiniums.
Eryngium amethystinum.
Gentian.
Linum narbonense.
" perenne.

Lithospermum purpureo cœruleum.
Meconopsis Wallichi.
Mertensia, in variety.
Myosotidum nobile.
Myosotis.
Omphalodes verna.
Plumbago larpentr.
Salvia azurea grandiflora. " patens.
Veronica amethystina.

## Blue Annuals

Anagallis.
Convolvulus minor.
Delphinium Blue Butterfly. Lobelia.

Nemesia cœrulea.
Nemophila.
Nigella.
Phacelia campanularia.

## LIST OF DELPHINIUMS TRIED AT WISLEY, 1912, AND WHICH RECEIVED AWARDS OF MERIT

```
AND THE DESCRIPTIONS GIVEN THEM BY THE ROYAL
    HORTICULTURAL SOCIETY
```

Albert Edward. Height of plant 5 feet, length of spikes 25 inches; very free-flowering; flowers semi-double, outer petals deep marine blue, inner petals rich violet-purple; centre small and dark.
Beauty of Langport.
Colonel Crabbe. A very handsome and effective variety, growing to the height of $7 \frac{1}{2}$ feet. The spikes are tall, tapering, and well furnished, and measure 3 feet long. The flowers have the outer petals cornflower-blue, and the inner ones bright violet-purple, with practically no eye. The plant is very freeflowering.
Cymbeline. A strong, healthy grower, reaching 6 feet in height;
spikes very numerous, 24 inches long; flowers semi-double, small, cornflower-blue tinged with violet-mauve. A good showy variety.
Darius. Height 6 feet. A very healthy, strong grower, bearing semi-double, creamy-white flowers on spikes about 21 inches long. One of the best whites in the trial.
Dr Bergman. Height $4 \frac{1}{2}$ feet, spike blunt, well furnished, 25 inches long ; flowers large, cornflower-blue tipped with bright violet-purple eye, small and dark. A very pretty variety.
Dr Lodzuidge. A very effective variety, growing to the height of $6 \frac{1}{2}$ feet. The flowers are lightly arranged on spikes 28 inches long, and are semi-double and of large size. The outer petals are cobalt-blue, and the inner ones bright violet, eye white.
Dusky Monarch. A very handsome variety, throwing up a large number of excellent spikes to a height of 9 feet. The flowers are large, deep violet-purple, in colour shading to marine blue towards the margins of the petals, centre dark.
Jessica. Height $8 \frac{1}{2}$ feet, spike 38 inches long; flowers semi-double, royal blue with a tinge of mauve, dark brown centre. A very free-flowering, healthy, and vigorous variety.
J. S. Sargent. A very handsome and effective variety, height $8 \frac{1}{2}$ feet, spike 3 feet long, tapering, well furnished, with pretty marine-blue flowers tinged with dark purple. A good late variety.
Kitty Wardell. A very pretty double variety, reaching 4 feet in height, with good spikes well furnished with well-placed, small, cornflower-blue flowers, slightly shaded with violet-mauve.
Lizzie Van Veen. A lovely variety-one of the best in the trial; height $6 \frac{1}{2}$ feet, spikes 35 inches long; flowers large, single, cornflower-blue with small white eye.
Lorenzo. A very healthy, vigorous variety, growing 8 feet high; spikes 28 inches high; flowers single, marine blue, slightly tinged with deep violet-mauve, lightly arranged, deep brown centre covered with yellow hairs.
Madame E. Geny. A very distinct variety growing $8 \frac{1}{2}$ feet high. The spikes are tapering, 40 inches long, and very effective. The flowers are of a good violet-purple colour, shaded with deep cornflower-blue, eye small and white, stems reddish.
Moerheimiz. Six feet in height, spikes about 30 inches long; flowers large, pure white with white eye; numerous branches arise from the base of the central spike. They are of a most convenient size for cutting, and well furnished with flowers.
Monarch. Height 9 feet, spikes 28 inches long ; flowers pale cobaltblue much tinged with bright violet, which increases in intensity
with the age of the flower. A very free-flowering variety with a white eye.
Mr J. S. Brunton. An excellent deep cornflower-blue variety having large flowers which stand out well from the main stem. It has a white eye covered with deep orange hairs, and grows 6 feet high. The individual spikes measure 20 inches long. The foliage is deeply divided.
Mrs James Kelway. A very beautiful variety, 8 feet tall. The spikes are blunt, and measure 33 inches long; the flowers are semi-double, pale Venetian blue with white eye.
Norman Hurst. A beautiful semi-double variety, having the inner petals violet-purple and the outer one marine blue. It has a white eye, is very free-flowering, and is 6 feet high, with spikes 21 inches in length. One of the earliest in the trial to flower.
Royal Standard. Height $4 \frac{1}{2}$ feet, spike good, blunt, well furnished, with marine-blue flowers having a white centre. Although of no great height, this proved to be one of the prettiest and most effective varieties in the trial.
Smoke of War. A very striking and distinct variety, growing 7 feet high. The spikes, measuring 33 inches long, are tapering and well furnished, with symmetrical large, deep violet-purple flowers.

## LIST OF THE BEST PHLOXES TRIED AT WISLEY, 1908 AND igo9, AND WHICH RECEIVED AWARDS OF MERIT OR MENTION

## AND THE DESCRIPTIONS GIVEN THEM BY THE ROYAL HORICULTURAL SOCIETY

P. André Michaux. Pale rose, with magenta eye ; flower in inch; broad flat truss. $2 \frac{1}{2}$ feet.
P. Aspasie. Rosy magenta, with white eye ; flower $\frac{1}{4}$ inch ; large, dense truss. $\quad 1 \frac{1}{2}$ feet. The calyces are bronze, forming a good background to the flowers.
P. Aviation. Salmon-rose; flower $1 \frac{3}{4}$ inch ; of good form, broad, dense, pyramidal truss. 2 feet. A very showy variety.
$P$. Béranger. Pale salmon-rose on opening, which changes to rose, slightly deeper at the eye ; flower $1 \frac{3}{4}$ inches; broad, dense truss. 2 feet.
P. Boule de Feu. Dark carmine-scarlet with a deeper eye ; flowers I inch ; poor truss. $\quad$ I $\frac{1}{2}$ foot.
$P$. Bouquet de St Cyr. White, with a rosy-crimson eye; flowers large ; truss large. $\quad \mathrm{I} \frac{1}{2}$ foot.
P. Chanzy. Magenta with a deeper eye; flower $\mathrm{I}_{\frac{1}{4}}$ inch ; large ; loose truss. 2 feet.
$P$. Coccinea. Bright, fiery-red flower, $\frac{3}{4}$ inch; loose truss. 4 feet.
$P$. Coquelicot. Bright fiery-red, with a rose eye ; flowers $\mathrm{I} \frac{1}{2}$ inch; small, dense, pyramidal truss. 2 feet. A good variety, but superseded by some of the newer ones of its colour.
$P$. Croesus. Strawberry-red, with a deeper eye; large, showy truss. 3 feet.
P. Croix de Sud. White, with magenta eye ; flower $\mathrm{I} \frac{3}{4}$ inch ; loose, much-branched truss. $1 \frac{1}{2}$ foot.
$P$. Delicata. White, with a faint tinge of magenta at the eye; flower $\mathrm{I} \frac{1}{2}$ inch ; loose, flat, much-branched truss. 3 feet.
P. Eclaireur. Rosy magenta, with an indistinct paler band surrounding the eye; flower $1 \frac{7}{8}$ inch, round and full; truss broadly pyramidal. $2 \frac{1}{2}$ feet. A very fine vigorous variety, and one of the earliest of the section, flowering from early July to mid-September
P. Epopée. Magenta, shading paler towards the eye; flower $1 \frac{1}{2}$ inch ; broad, branching truss. $1 \frac{1}{2}$ foot.
P. Espoir. White, faintly tinged with lilac, with magenta eye; flower 13 inch, of good form ; good, vigorous, broad truss. $2 \frac{1}{2}$ feet. The best of its colour.
P. Etna. Fiery red, with a rose eye; flower $\mathrm{I} \frac{1}{2} \mathrm{inch}$, of poor form ; short, dense, flat truss. $3 \frac{1}{2}$ feet. Showy.
P. Eugène Danzanvilliers. Lilac, with white centre; flower $1 \frac{1}{2}$ inch, flat; truss much branched, especially at the base. $2 \frac{1}{2}$ feet.
$P$. Fernand Cortez. Rosy magenta, with deep eye, and tinged salmon round the eye; flowers of poor form ; starry, broad, well-branched, pyramidal truss. 2 feet. A showy variety.
$P$. Fiancée. Pure white, with the faintest tinge of primrose in the eye; flowers $\mathrm{I} \frac{1}{2}$ inch, of good form ; broad, dense truss. 2 feet.
P. Flambeau. Strawberry-red, with deeper eye ; flower $\mathrm{I} \frac{1}{2}$ inch ; well-formed, good pyramidal truss. 2 feet.
P. Freifraulein von Lassberg. Pure white; flower $1 \frac{3}{4}$ inch, flat. 2 feet. A weak grower.
P. G. A. Strohlein. Bright fiery-red, with rose eye; flower I $\frac{1}{2}$ inch; loose, branched, oblong truss. 3 feet. This variety does not burn so badly as most of its colour.
$P$. Gen. Giovaninelli. Carmine-purple, with deeper eye and a

## LIST OF THE BEST PHLOXES

paler region round it ；flower $1 \frac{1}{2}$ inch ；very broad，flat truss． 13 foot．
P．Gruppenkönigen．Pale rose，with a carmine eye ；flowers large， of good form ；large pyramidal truss． 3 feet．One of the showiest in the trial．
P．Henri Murger．White，with magenta eye；flower $1 \frac{3}{4}$ inch ； starry，loose，weak truss． $3 \frac{1}{2}$ feet．
$P$ ．Iris．Magenta self，with a violet reverse to the petals；flower I⿱十口⿱⿰㇒一乂凵2 inch ；flat，large，much－branched truss． $2 \frac{1}{2}$ feet．A showy variety．
P．John Forbes．Mauve，with a deeper eye；flower $\frac{1}{2}$ inch ；of good form；much－branched truss，the side branches well flowered． 3 feet．
P．Jules Cambon．Deep rosy pink，with rose eye ；flower $\mathrm{I} \frac{1}{2}$ inch ； dense，pyramidal truss． 2 feet．
P．Lady Treeddale．White，faintly tinged with lilac on the reverse of the petals ；flower $\frac{1}{2}$ inch ；dense，pyramidal truss． 2 feet．
P．Le Mahdi．Deep reddish violet，with a deeper eye；flower $\mathrm{I} \frac{1}{2}$ inch ；good truss． $2 \frac{1}{2}$ feet．
P．Longchamps．White，with a diffusing magenta eye ；flower $1 \frac{1}{2}$ inch ；of poor form；broad，loose truss． $2 \frac{1}{2}$ feet．
P．Lord Rayleigh．Violet tinged with magenta，with magenta eye ； flower $1 \frac{3}{4}$ inch ；broad truss． $2 \frac{1}{2}$ feet．
P．Lothair．Madder－carmine with deeper eye；flower $\frac{1}{2}$ inch； loose，much－branched truss． $2 \frac{1}{2}$ feet．A showy variety．
P．Madame Carvalho．Pure white on opening，becoming splashed with rose ；flower $1 \frac{3}{4}$ inch；of good form and substance ；large pyramidal truss． 2 feet．
P．Miss Pemberton．Salmon－pink，with a deep rose eye；flower I ${ }_{4}^{3}$ inch ；of good form ；dense，pyramidal truss． 2 feet．
P．Matador．Strawberry－red，with a slightly deeper eye ；flower $1 \frac{1}{2}$ inch；flat，pyramidal truss． $2 \frac{1}{2}$ feet．
P．Muriel Rogers．Rosy red，with large，carmine－purple eye； flower $1 \frac{5}{8}$ inch ；flat，much－branched，broad pyramidal truss． 2 feet．A very good variety，following in late July．
P．Panama．Pure white ；flower $\mathrm{I} \frac{1}{2}$ inch ；dense pyramidal truss． I⿱十又⿱亠䒑口阝攵 foot．A showy variety．
P．Panorama．Mauve，with a distinct white eye and a pale mauve band round it ；flower I inch ；dense broad truss．I $1 \frac{1}{2}$ foot．
P．Pantheon．Salmon－rose，with magenta eye and a pale zone round it ；broad pyramidal truss． $2 \frac{1}{2}$ feet．
P．Prosper Henry．White，with magenta eye；flower $1 \frac{3}{4}$ inch； of good form ；much－branched pyramidal truss． 2 feet．
$P$. Pureté. Pure white, with faintest tinge of cream in the eye; flower I inch ; broad, loose truss. $1 \frac{1}{2}$ foot.
P. Regulus. Carmine-purple, with a paler eye; flower $1 \frac{1}{4}$ inch; of good form. 2 feet.
P. Reichsgraf von Hochberg. Rich crimson-carmine self; flower I $\frac{3}{4}$ inch ; flat, vigorous truss. $3 \frac{1}{2}$ feet. A showy variety, but burns badly.
P. Roi des Roses. Salmon-rose, with a deeper eye; flower $1 \frac{1}{4}$ inch ; of good form ; loose, much-branched truss. 3 feet. A showy variety.
P. Sesostris. Rich crimson-carmine, shaded maroon at eye; flower $1 \frac{3}{4}$ inch ; of good form ; good truss. 3 feet. The best of its colour.
P. Sylphide. Pure white, with faint tinge of cream in the eye; flower $1 \frac{1}{4}$ inch; weak truss. $1 \frac{1}{2}$ foot.
$P$. Tapis Blanc. Pure white, slightly tinged with primrose at the eye ; flower $1 \frac{3}{4}$ inch, with reflexed petals; broad, much-branched truss. I foot.
P. Wm. Muir. Reddish violet, with a distinct carmine eye; flower $1 \frac{1}{4}$ inch ; loose truss. 3 feet.
W. Robinson. Rosy salmon, with a deeper eye ; large, well-formed flowers ; good truss. 3 feet.

## INDEX

Acetylene gas refuse for soil improvement, 45.
Alphabetical list of plants, 217.
American gardeners' methods, 5 .
Annuals and bulbs, 115 et seq.
suitable for hot, dry soils, 127.
in herbaceous border, 130.
Apparatus for designing gardens, 24.

Apricot trees, protection of, 206.
Archways, brick, use of, 33 .
Arrangement of plants in mixed border, 102 et seq.
Artemisia lactiflora, 94.
Aster Amellus, 94.
Aubrietias, cuttings of, 61.
Aubrietia graca for walls, 9 .
Autumn bulbs, 189 .
perennials, 190.
Backgrounds, advantages of, 5 . suggestions for, 5 .
Bagatelle, France, description of gardens at, 19 .
Beech hedges, 10 .
Berwickshire cliffs, the, 12.
Biennials for the herbaceous border, list of, 131.
Blue flowers in pure tones, list of, 289.
Blue gardens, 147 et seq.
Borders, construction of one costing . $£ 5,196$.
herbaceous, inkitchen gardens, 27.
long, arrangement of, 33.
mixed, 86 et seq.
raised, 40, 90 .

Borders, remaking of, 45 .
stony, improvement of, 43 .
Box hedges, transplanting of, II.

Burnet, for breaking hard-pan, 43.

Burning clay, method of, 4I.
Carnations, 100, 208, 209.
Carpeting, 51 , 106.
Catalogues, descriptions, errors in, $8 \mathrm{o}, 8 \mathrm{I}$.
Chalky soil, treatment of, 42.
Chicory for breaking hard-pan, 43.

Chrysanthemums, Scotland and Staffordshire, 86.
Clay soil, spadework for, 39 .
improvement of, by draining, 39.

Clippedhedges at Lenox, U.S.A., 17.

Clipped lime hedges, 10 .
Cocksfoot, for breaking hardpan, 43 .
Colour, attention to, 76,77 et seq. standardisation of, $80,8 \mathrm{I}$ et seq.
Cost of labour, 64 et seq.
of plants, 56 et seq.
Cottage gardens, 86, 87, 88 .
"Crazy-patchwork" paths, 188.
Cupressus macracarpa for background, 8, 89 .
Cuttings, increasing by, 60, 6I, 62.

Dahlias for garden decoration, $124,125$.
Deep cultivation, results of, 18.

Delphiniums of clear blue, list of, 155.
list of, 289 et seq.
Design, accuracy essential, 30.
apparatus necessary, 24 .
importance of plans and definite object, 22, 23, 29, 36.
need for specialisation, 36 .
Disease of hollyhocks, 95 .
Down Hall, Harlow, gardens at, 14.
winding walk at, 26.
Draining for improvement of clay soils, 39.
Dutch garden, 7 .
Eaton Hall, gardens at, 35 .
Economy, 67.
Elizabethan garden, 32.
Eremuri, suitability for raised borders, 40.
Expenses, cost of plants, labour, etc., 56 et seq.

Farmyard manure, 42.
Flagged paths, 9, I34.
Flowers of sulphur for Madonna lilies, 120.
Foregrounds, construction of, 108, 109.
list of suitable plants, 109.
Foster, Sir Michael, 161, 165.
Frost, avoidance of, 4.
Fungoid growths, removal of, 45.
Funkia Sieboldii, 104.
Gardener's first duty, 6.
responsibility, 66.
wages, 65 .
Gardens at Bagatelle, 19.
at Down Hall, 14.
at Eaton Hall, 35.
at Kew, 18.
at Park Place, Henley, 35.
by the Thames, 33 .
designing of, 22, 23 et seq.
Dutch, 7.
Elizabethan, 32.
herbaceous, laying out of, 16.
Lady Samuelson's at Beaulieu, 18.

Mr G. F. Watts', 32.

Gardens, Mrs Cornwallis-West's
32.
one-colour, 25.
spring, 26.
square, $26,69,97$.
stone-paved, 28, 32.
walled, 35 .
Gas-lime, uses of, 44, 45 . for fungoid growths, 45.
"Ghost-gardens" in America 140.

Golden elder for background, 190. privet for background, 190.
Gravel paths, 188.
soils, treatment of, 4 I.
Grey garden, 142.
Grouping of colour, 106 et seq.
Hampton Court, 49.
Hanbury, Sir Thomas, 20.
Harmony in planting, 93.
Hedges, beech, io.
box, 10 .
clipped lime, $10,17$.
Cupressus macrocarpa, 8, 89.
privet, 8.
Sussex, 10.
sweetbrier, 89, 141.
tamarisk, 9.
Thuja, 8, 34, 89.
yew, $8,35,42$.
Herbaceous, definition of, II4.
borders in kitchen gardens, 27. plans of, 200.
gardens, laying out of, 16, 193 et seq.
plants, arrangement of, 31 .
v. bedding plants, 68,69 .

Hollyhock disease, 95 .
Hot soil, 46.
Increasing by division, 60, 6I, 62 .
Iris germanica for foreground, III.

Irregular plantings, 104.
Juxtaposition of colours, 80.
Laurels, cutting out, 6 .
Lavender from seed, 62.
garden, 176 et seq. plan of, 177.

Leaf-mould, 45 .
Lilies for back row, 144. time for removal, 96 .
Lime, 44.
List of plants grown from seed, 63.
for border in a quarter-acre garden, 70,71 et seq.
for foreground, Iog.
for middle row, 113 .
of blue flowers in pure tones, 289.
of delphiniums, 289, 290, 29 I.
of the best phloxes, 291, 292 et seq.
Loam, 38.
Long borders, arrangement of, 33.

Madonna lilies, disease of, $\mathbf{I} 20$.
Manure, placing of, 40.
Massing of distinct species, 156 , 157 et seq.
Mauve garden, plan of, 135 .
Michaelmas daisies, 168.
Millstones, old, use of, 32.
Mixed border, 86 et seq.
the best only to be grown, 91, 92.

Montbretias for cutting, 122.
Mortar-rubble, 40.
Moving plants, right time for, 97.

Mulching, 47.
Nasturtiums, soil required, I30.
Native material, importance of, 17.

One-colour garden, 25, 133 et seq.
Ordering plants, advice as to, 59.

Outdoor chrysanthemums, 86.
Overworked soil, treatment of, 43.

Owen, Rev. Bulkeley, 6.
Pæonies and annuals, 95 .
Pæony garden, 170 et seq.
Pæony, varieties of, 172 . prices of, r 7 I .

Park Place, Henley, gardens at, 35, 148.
Paved paths, 91.
Peai-moss litter for light soils, 43.

Phloxes for stone-paved gardens, 28, 29.
in mixed border, 99.
list of the best, 291 et seq.
Plan of author's herbaceous
garden, 194. borders, 200.
of lavender garden, 177.
of mauve garden, 135.
of old oblong garden, 100.
of square garden, 98 .
Planting-time, 46.
Planting in dry weather, 47.
for constant bloom, 50.
Plants grown from seed, list of, 63.
for border in a quarter-acre garden, list of, 70, 71 et seq.
to hide dying foliage, 95 .
Price of new varieties of perennials, 58, 59.
Privet hedges, 9 .
Protection of peach and apricot trees, 206.

Quicklime for decomposition of weeds, 43.
for improvement of soil, 43.
Raised border, 40, 90.
Remaking border, 45.
Replanting, 48.
Replenishment of borders at Hampton Court, 49.
Responsibility of gardeners, 66.
Royal Horticultural Society, colour chart, 84.

Scented garden, 30, 3 I .
Scotch garden, description of, 112.

Seaside garden, 12.
Seeding weeds, need for care, 43.

Seeds, sowing, 62, 127.
Sense of proportion, 14.

## 298

Shirley poppies, method of raising, 128.
Site, choice of, 3, 4 et seq.
Slugs, 43 .
Snapdragons, 174 et seq.
Soils, chalky, 42.
clay, 39.
gravel and sandy, 4 I.
loam, 38.
sandy or peaty, 13.
Spadework, 38 et seq.
Spring flowers, 180 et seq.
gardens, 26, 49.
Square garden, 26, 69, 97, 138.
plans of, 98, 139.
Staking of perennials, 52, 54, 55 .
various methods, 52 et seq.
Stone figures, uses and abuses, 14.

Stone-paved garden, 28, 32.
Stony border, improvement of, 43.

Succession of bloom, 48, 49.

Sun, necessity of, 4,5 .
Surroundings, relations to, 12.
Sussex hedge, io.
Sweetbrier hedges, 89, 141 .
Tamarisk hedge, 9.
Terraces, arrangement of, 17 .
Thuja for background, 8, 35, 89 .
Trellis work, value of, 25 .
preservation of, 25 .
Van Verendael, 158.
Vegetable refuse, disposal of, 43 .
Vistas, their use and abuse, I 5.
Walled gardens, 27, 35.
Weeding, 45 .
Weeds, disposal of, 43.
Winding walks, 26.
Wire-netting, 53.
Wire-worms, 38.
Yew hedges, 8, 10, 35, 42.


## East End of Flower Border



## West End of Flower Border



## Centre Portion of Lono Border



i

## Herbaceous Border Perennial Plants

My new. Catalogue is now ready, containing Description of New and Old Plants for the HERBACEOUS GARDEN.

Asters
Campanulas
Delphiniums
Dianthus
Eremurus
Erica (Heaths)
Gladioli
Hardy Ferns
Hady Fens Pyres
Hardy Grasses \& Bamboos
Trees and Shrubs, Hardy Flowering vars.
Kniphofias Spiræas Veronicas, etc.
Specimen blooms with names attached, and copy of catalogue, will be posted free of charge on application.

MAURICE PRICHARD The $\mathscr{X V}^{\text {urseries }}$ CHRISTCHURCH, HANTS, ENGLAND

Make your Garden a blaze of beautiful colour from early Spring to late Autumn

Kelway \& Son, the Royal Horticulturists, of Langport, Somerset, offer you the benefit of their experience of over 60 years in matters horticultural, to help you to make the most of your garden-to make it a Garden Beautiful. In the famous

## KELWAY COLOUR BORDER

(Regd.)

Nature's beautiful gifts are planned by Kelway's method, which ensures a riot of glorious colour, a constant succession of ever-changing hues throughout the greater part of the year. The cost is only 15/to $25 /$ - for 10 square yards, and the plants are delivered to you carefully packed and labelled, and arranged in the correct order for planting.
WRITE TO-DAY FOR GARDENS of DELIGHT 6d. post free. It gives full details

ARE YOU STILL LIGHTING YOUR RESIDENCE WITH OIL LAMPS, THOSE TROUBLESOME RELICS OF THE PAST?

IF SO, APPLY TO THE ALLEN COMPANY FOR PARTICULARS OF THEIR ACETYLENE LIGHTING SYSTEM, WHICH TURNS NIGHT INTO DAY.


A TYPICAL INSTALLATION
PERFECTLY SIIMPLE \& :: SIMPLY PERFECT ::

# THE ALLEN COMPANY 

I06 Victoria Street, London, S.W. (Near Victoria Station)

## BARR'S <br> Hardy Perennials, Rock Plants, Alpines and Aquatics



Barr’s Rock Garden at the Roval. International Horticultural Exhibition, 1912. Awarded Large Silver Cup.

## Barr's Selections of Hardy Rock-Garden Plants for Sunny or Shady Situations

12 beautiful named varieties, 5 s .6 d .87 s .6 d.


Special Selections of Perennials for the Hardy Flower Border and Aquatics for the Water Garden. Plants suitable for Naturalising in Shrubberies, Woodland Walks, and Wild Gardens, etc., fully described in

Barr's Hardy Plant Catalogue, sent free on application.
For Seeds of the best Perennials and Annuals for Flower Garden and Greenhouse, see Barr's Seed Guide, sent free on application.

## BARR \& SONS, in ine is king strerr

 And The Nurseries, Taplow, Bucks.
# ROCK GARDENS HOW TO MAKE AND MAINTAIN THEM 

## BY

LEWIS B. MEREDITH


## WITH INTRODUCTION BY

F. W. MOORE, M.A., A.L.S.

And an Alphabetical List of Plants suitable for the Rock Garden, with notes on the aspect and soil they require.

> Demy 8vo, with Plates. Cloth. 7s. 6d. net; postage inland, $6 d$.

## From the Introduction

It is a practical work, written by a practical man about a subject which he thoroughly understands, and by one who has experienced all the joys and sorrows connected with the cultivation of rock plants and alpines. To ensure even moderate success in rock gardening two main points are essential: a properly constructed rock garden, and a reliable guide to the nature and requirements of plants to be grown on $i$. There existed a demand for a sound practical work, giving explicit and detailed information on these points, and this volume meets it.

[^2]

# S UN - DIALS 

form very interesting features for gardens, lawns, buildings, and most useful to set the clocks of the house by. Their moral inscaiptions in the form of mottoes and decorative beauty plead for their continuance.

## ANTIQUE SUN - DIAL AND PEDESTAL.

without base stone, £5,5s. Od.


ILLUSTRATED BOOKLET WITH DESCRIPTIVE ARTICLES ON THE ANEROID BAROMETER, MAGNETIC COMPASS AND SUN-DIAL, POST FREE.

## FRANCIS BARKER (Dialist),

"Sun-Dial House," I2 Clerkenwell Road, London.
Maker and Restorer of Sun-Dials.
Established 1848.

## Glorious Begonias

Winners of Gold Medal at International Exhibition, 1912

## AWARDED 31 GOLD MEDALS

For Exhibition, Greenhouse, and Conservatory Decoration, Hanging Baskets and Bedding

Double Seed, 2s. 6d. 8 5s. Single, Is., 2s. 6d. 8 5s.

OTHER SPECIALITIES:
BORDER CARNATIONS, PERPETUAL FLOWERING CARNATIONS, CYCLAMEN, NOBLE DELPHINIUMS,

LILY OF THE VALLEY, BLUE PRIMROSE, POLYANTHUS, VIOLETS, etc., etc.

Illustrated Catalogue Free on Application
Blackmore \& Langdon :: BATH

## STUDIES IN SEEDS AND FRUITS

An Investigation with the Balance
By

H. B. GUPPY, M.B.

The author has given many years to the study of the subject, and deals more especially with the questions of the evaporation and absorption of water in seeds. He is the author of the voluminous volume, "A Naturalist in the Pacific," published several years back. He has studied his subject largely in the Pacific and the West Indies.

$$
\text { Demy 8vo, Cloth, nearly } 600 \text { pp. Price 15s. net. }
$$

[^3]
[^0]:    ${ }^{1}$ Yew hedges are illustrated in the photo of "A Scotch Garden," and "Hurst Court: Approach to Herbaceous Garden."

[^1]:    1 This little gem deserves to be more widely known. The leaves are of the freshest spring green and the flower the colour of an Italian sky, and it grows from 1 foot to I 8 inches high.

[^2]:    "It is safe to say it is one of the best of the really practical works which have been written, and we can cordially recommend it to everyone who is embarking, or has already embarked, on this fascinating branch of horticulture." -The Gardener's Chronicle.
    "Mr Meredith writes with practical experience; his information is most explicit and detailed, and he goes into the whole question of site, construction, cultivation and cost in a way which should make it possible for every reader of his work to make and maintain a successful rock garden . . . a a thrice-welcome book, practical, clear, concise, and yet written on lines that satisfy the best canons of horticultural art."-The Ladies' Field.

[^3]:    " His results, though mostly physiological, prove very suggestive in many other directions. Masses of notebook details serve to demonstrate the author's conscientiousness." - Journal of Botany.

    WILLIAMS \& NORGATE, $\underset{\text { COVENT }}{\text { Co }}$ HENRIETTA STREET,

