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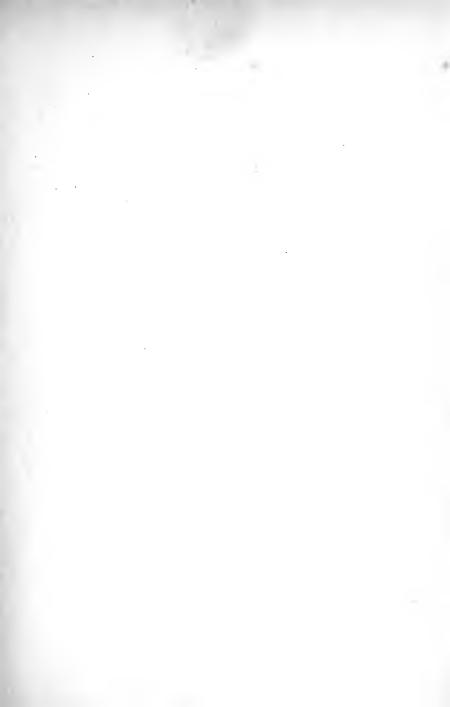
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Childrens book of gardening

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THE CHILDREN'S BOOK OF GARDENING

UNIFORM WITH THIS VOLUME

By Miss Conway and Sir Martin Conway THE CHILDREN'S BOOK OF ART	By ELIZABETH W. GRIERSON CHILDREN'S TALES OF ENGLISH MINSTERS			
By Elizabeth W. Grierson	By G. E. MITTON			
THE CHILDREN'S BOOK OF CELTIC STORIES	THE CHILDREN'S BOOK OF LONDON			
By Elizabeth W. Grierson	By G. E. MITTON			
CHILDREN'S TALES FROM SCOTTISH BALLADS	THE CHILDREN'S BOOK OF STARS			
By Elizabeth W. Grierson	By G. E. MITTON			
THE CHILDREN'S BOOK OF EDINBURGH	THE BOOK OF THE RAILWAY			

A. AND C. BLACK . SOHO SQUARE . LONDON, W.

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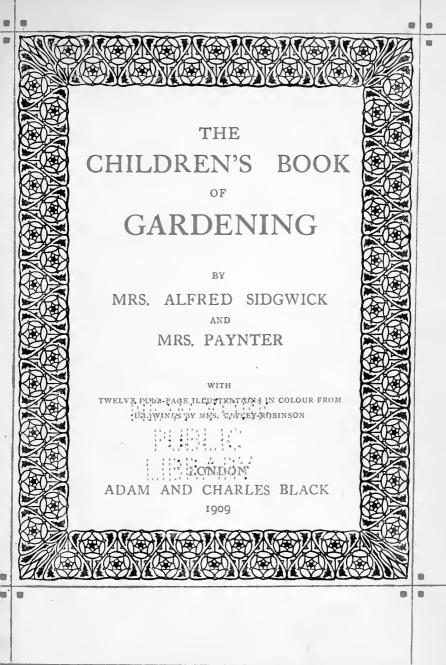
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A HERBACE- HUER.



'It is the Spirit of Paradise
That prompts such work, a Spirit strong,
That gives to all the self-same bent
Where life is wise and innocent.'

WORDSWORTH.



DEDICATED

то

BETTY, BARBARA, AND CYRIL





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PREFACE

This book was suggested by the questions of a boy of twelve who lived in Germany and sent for an English book that would teach him the elements of gardening. One of the authors asked the editor of a well-known gardening journal to recommend her a suitable book, and found that he knew of none written from a child's point of view, and supplying the instruction a child could understand and use. Yet in these days, when so many children have a garden, such a book must be needed. The aim in this one has been to tell the juvenile reader how to make his garden grow, and the authors have not allowed themselves to wander in the pleasant byways of description, reflection, or amusement. They wished to help the budding gardener rather than to entertain the child, and they have tried to keep within the limits of what a child can do.

But as children vary in age and strength as well as in circumstances, they will not all be able to follow the whole of the advice here given. Cyril, for instance, could dig his own little plot of ground, but Betty could not for many a year to come; and though Cyril may not have the patience to sow his sweet peas in the best of all possible ways, Betty will read in this book how it should be done, and then get one of her father's gardeners to do it for her. As for Barbara, she is a traveller, and can have no garden of her own; but she sets daffodils in her friends' gardens, and is content to see them, with her inward eye, dancing in the breeze for their delight. So all children, according to their strength and means, may love a garden, whether it is contained in a few flower-pots on a city window-sill, or encouraged to expand and grow in the wide spaces of the country.

Gardening, like other bents, will find a way; but it will run more smoothly if it has a little help at the beginning.

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THE CHILDREN'S BOOK OF GARDENING

CHAPTER I

THE SITUATION AND SOIL

The first thing to decide is that you really want a garden of your own, and mean to work in it and keep it clean and tidy. The next thing is to learn a little about situation and soil, because you cannot choose which plants to grow until you know what conditions you can give them. You must not think that you can ram any plants into any patch of ground with success. There are a few that are obliging and will live almost anywhere, but even these will generally show you by their size and health whether they like their home or not. Many will just exist, but not do well without the food or place that suits them, while others will die unless they have what they want.

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If you can possibly avoid it, do not have your garden under trees or large shrubs, or close to an evergreen hedge. The drip from trees is bad for nearly all plants, and the big roots made by trees and shrubs exhaust the soil. on account of the roots, you cannot dig the ground properly and feed it with manure. ever, if your choice is between a shady garden and none, you should certainly take it, and learn what can be done with it. Later on in the book we will tell you which plants will do well in such a spot, and how you should treat them. The best situation for a garden is one that gets the morning sun, and is either right out in the open or sheltered on the north. It is best for the plants and best for you, because in a warm, sunny corner you can often work on days when it would not be safe in the chilly parts of the garden.

Do not have a large plot if you mean to look after it without help: twelve feet long by seven feet wide would be enough, and even a smaller piece could be made into a pretty garden. If you have more than you can keep tidy, the grown-ups will be sorry they let you have a garden at all, and some day they will say that the gardener wants your bit of sunny border for his winter lettuces, and that you had better take yourself and your weeds and your mess away to that no-man's-land in the shrubbery, where nothing much will grow, and where it is always sad and chilly. So we will imagine that your garden is twelve feet long and seven feet wide, and that the sun shines on it whenever it is fine.

Whether your plot is a bed by itself or part of a wide border, it will not be easy and pleasant to manage unless you make a path through the centre—a dry, hard, narrow path, on which you can stand or kneel when you are at work amongst your plants. Across the breadth would be the most convenient position. To do this you should get a penny piece of tape, because it is easier to see and keep straight than string. Measure the length of your garden with it, having tied one end of the tape to a stick and put the stick firmly into one corner of the ground. Tie a knot in the tape when you reach the other corner. Then carry the knot back to the stick, and the doubled tape will mark the centre of the whole length. Put a stick into the ground there. Then

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you get two other sticks, and put them nine inches on either side of the centre one, so as to get your eighteen-inch path exactly measured at the top of your garden. The other side of the garden may be measured in the same way, and the centre sticks removed at either end. Then you bring your tape right along both sides of your path, tying it to your sticks at each end, so that you have two straight lines to guide you. If you are going to make your path yourself, you must now take your spade and dig out all the earth to the depth of ten inches. This will be hard work, and take you several days, but if you want your path to be dry and firm it must be done. The earth you throw out should be divided as evenly as possible between your two beds, and be neatly spread on them when you have finished. The deep trench you make by digging must be filled with broken stones or pieces of brick well stamped down, and afterwards covered with gravel or fine Now you will have two borders, each seven feet long and five feet three inches wide. If you choose you can make one side a flower garden and the other side a kitchen garden, and in your kitchen garden you can grow some flowers as

well as vegetables. In any case, you will be glad of your path, and if your plot is smaller than the one we recommend, you should make it on one side instead of in the middle. As far as possible, you should do all your gardening from it, so that the soil around the plants does not get trodden down too hard. Most plants like to have a firm hold with their roots, but not to have a caked surface that keeps out the air and rain.

Before you put in any plants you must pay some attention to the state of your soil. Even grown-ups often seem to think that earth is earth, and that any flowers will flourish in any ground. But, as a matter of fact, plants are even more various and dainty about their food than human beings; they answer as well to clever treatment, and they look as starved as slum children when they are not properly fed. Gardeners usually tell you that nearly everything will flourish in a good loam, and that it may be either natural or the result of cultivation. Soil of this kind is a mixture of clay, sand, and humus, and is easily worked. In or near London you generally get abominable soil in your garden, because the builders have dug out the good stuff and replaced

it with any kind of rubbish. Everyone knows the London mixture of black, sticky clay, broken bricks and bottles, and the roots of grimy trees and shrubs. Many things will no more thrive in such a medium than a baby would on lobster salad. If you have to begin your gardening career with a builder's rubbish-heap, you must be content to grow some of the strongest things, such as Starworts, Foxgloves, Nasturtiums, and some bulbs, and to renew them every year.

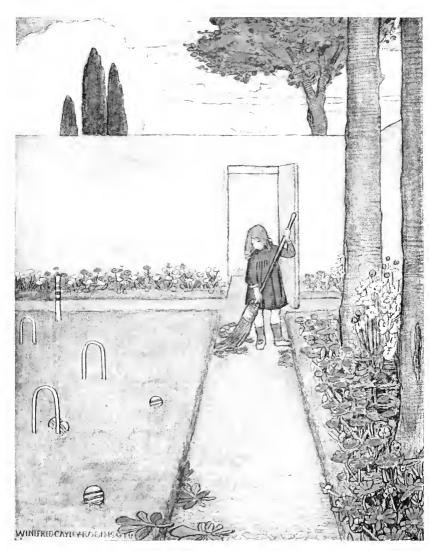
Roughly speaking, soils may be divided into heavy and light—those that hold wet and those that do not. The heavy kinds are mostly clay, though pure peat retains a great deal of moisture. The light soils are gravel, limestone, and sand. If you are used to a heavy clay soil, you will envy the people who have a light sandy one; and then some day when you come to work a hungry, sandy garden, you will wish for some of the sticky soil that is not easy to handle, but which many plants love. In either case you must try to improve matters, and to do this you must first find out what your soil is. In a limestone country you need not add lime, but it would be good

for clay. In Holland pure sand has been made fertile by the addition of cow manure.

It is often said that the gardener's year begins in November, because that is when you would make a new bed, or feed and alter an old one. If you make a bed well one autumn and grow things that like to be left alone, you would obviously not make it all over again the next. You would 'mulch' any part of it that required food or protection—i.e., you would supply a top dressing, a winter blanket of manure that would both keep things warm, and, with the help of the air and rain, send them food. When the spring comes, these top dressings look untidy, and they are either lightly and carefully forked in or taken away. By that time they are chiefly straw. When you are making a new bed, or reorganizing an old one completely, you cover the soil three inches thick with manure, make trenches, and take care that it is all buried at least ten inches deep, because very few plants like to come into contact with it when it is first put into the ground. It is an operation that you cannot manage at all for yourself if you are a girl. You must get a gardener or an elder brother to do it for you. If you tried

digging in manure, your nurse would say to you what the nurse in Leech's old picture said to the child who stirred her tea with the snuffers: 'Miss Mary, you are not to stir your tea with the snuffers. It is not at all ladylike, and I am sure your papa would not approve of it.'

The manure used should not be quite fresh, or it will make the earth 'sick,' as gardeners say, and kill your delicate plants and seedlings. After it has been dug in, the winter frosts and rains do a great deal to ripen it, and in the spring, when you plant, your flowers will be vigorous and plentiful, because they will find the food they need ready for them. But if you live in a town you may not be able to get farm manure easily, and then you would find a chemical one useful. Clay's Fertilizer is a well-known manure, and so is Shefa, but many people have killed their plants by using too much of them. A tablespoonful to the square yard is enough, and it should be scattered evenly over the surface before it is dug There are many other chemical manures, but it is not necessary for you to know much about them yet. If your grown-ups understand them, they will provide you with what your



THE TIDY CARDENER.



soil needs; and if they do not, you can get on very well with the manures described here. not use chemical manures if you have a damp, heavy soil. In any garden it is a good plan to collect all the rubbish you can-old rags and toys, for instance, dry dead leaves, and small dry sticks —for a bonfire. The ashes left provide a food that all plants like, and they should never be wasted, but dug into the soil. In the country soot is good for your soil, and most useful in keeping off slugs. In a town you would not use it at all except as a defence against slugs. Leaf-mould is good for all soils, but it is not a rich food. Sand should be mixed with clay land that is heavy and sticky. Lime is valuable where soil is 'sour,' dark, and mossy, and some plants need it, as a child needs milk; but you had better not try to apply it by yourself. It has to be 'slaked' by the air or with water before it is used, and makes a white powdery dust that would not be liked on your clothes. Mortar from buildings contains lime, and is easier to manage.

If you cannot enlist a gardener, and are going to make your own garden, you must learn to dig it over properly, and for this you will want a strong spade suited to your height. You begin by digging a trench ten inches deep from one end of your garden to the other. The earth you take out should be put in a wheelbarrow or on the farther side of the border. When the first trench is finished you put some manure all along it; then you start a second one, close to the first, and this time you put the earth you take out into the manured trench ready for it. In this way the manure and the soil that was on the top get buried beneath soil that has been hidden till now from the light and air. You go on making these trenches side by side until you reach the edge of the border, and you fill the last one with the soil you first removed, which is waiting for you in the wheelbarrow. In digging you should put your spade straight down into the ground, and help it with your foot to go in deep; then lean back on it, lift it out full of soil, and tilt it sharply into the empty trench. But you should not try to dig with a full-sized spade, as even with a small one you will find it hard work. The operation is a most important one, because when the buried soil is brought to the top the weather comes and gardens for you there, as well as deeper down, where the manure now lies covered. The winter frosts, the summer rains, the air and the sunlight, all affect it strongly, sweeten it, break it, and make it ready for your flowers. In the winter the surface of your beds should be left as rough as possible, because then the frost can get in easily and do its work. We will tell you later several ways of protecting some of your plants from frost, for the degree of cold that improves your soil will kill your favourite plants if you do not take care of But if you become a really keen gardener, you will find that you often look at the weather from the gardener's point of view. The rainy day that is disappointing other people will be settling in the newly-planted things, or helping your seeds to germinate, or persuading your bulbs to put out roots. When warm weather comes, you know that everything will take a start, and get on quickly; but the frosty days that skaters love will make you anxious, especially while you are a beginner. When you have had a garden for a year or two, you will have seen many a plant hang its head for a time and after all recover.

The tools used by your elders will be too large

and heavy for you, but on no account have a 'Child's Garden Set,' as they are never strong. Buy each implement separately, of good quality, and the size to suit you. You will want a spade, a hoe, a rake, a broad flat trowel, and a small hand-fork. If possible, you should also have a two-quart watering-can, a sieve, and a little galvanized iron or wooden wheelbarrow for rubbish. Always knock the earth off your tools when you have done gardening, scrape them clean, and put them away in a dry shed. They should never be left out in the wet. The watering-can should be emptied and turned upside down to dry. If you cannot have a wheelbarrow of your own, you must use an old pail or basket for weeds and rubbish. These should be carefully collected as you work, and then either thrown away or saved in a neat heap for your bonfire. Weeds are sometimes burnt, sometimes buried deep under the soil to make 'humus,' and sometimes left on a rubbish-heap until they have decayed and are ready to make soil again. 'Humus' is the dark earthy substance that you get from decayed vegetation, and it is useful to plants; but in your little plot you will not have a large quantity of weeds, and when you have planted it you will not want to dig holes to bury them. You will see many operations going on in the large garden that you cannot imitate and need not understand until you have learned to cultivate your own. When that time comes, and you know all that we can teach you, there are many larger, fuller books that will tell you a great deal we must leave untold. We shall only discuss things that you can grow without much skill, or strength, or expense. A little sense and patience, and a little of your pocket-money, will enable you to carry out our instructions.

But we do not mean that you can grow all the plants we talk about in one summer. We have chosen a few from thousands, and from those few you must choose again, according to your taste and your conditions. All the beautiful annuals and perennials we speak of will grow in any country garden that has sun part of the day, and we will tell you which do best in towns. But it is most important not to grow more things than you have room for or time to tend. There is no pleasure in a crowded, badly-grown annual, for instance, that is mean and stunted, because twenty

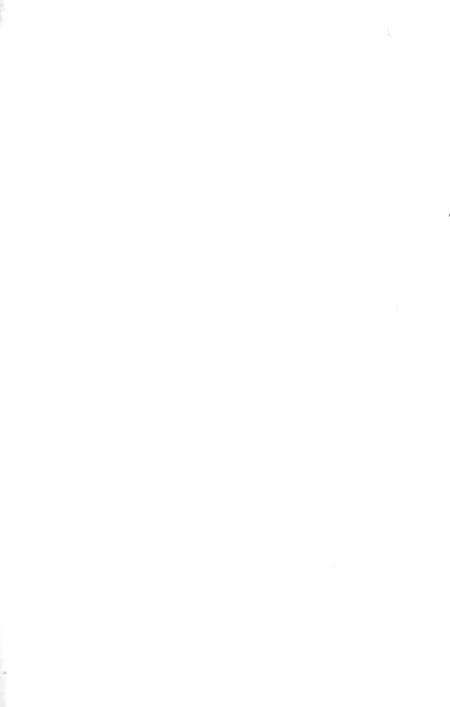
plants are struggling for life where one would just flourish comfortably. You must consider well what you want to grow and what you can grow, both in your flower and your vegetable garden. You must find out what size the plants will be, what colour, and when they will flower. It is no use to say to yourself that a scarlet autumn Gladiolus would look well next to a white Foxglove; you must remember that the Foxglove flowers in June and the Gladiolus in August. You must be careful not to put orange and magenta next to each other; but, on the whole, we should advise you not to trouble much about colour yet. Out-of-doors flowers harmonize in unexpected ways. You should consider the height of your plants, and put the tall ones at the back of your border. There are some exceptions to this rule, but we will leave you to study those in any well-kept gardens you are lucky enough to see. As long as your garden is a child's garden you had better put your dwarf plants in front and your tall ones behind. But you must find out which plants will like your climate and your soil, and which you have room for comfortably. If you have a tiny plot, do not choose anything that will make a big bush. Some lovely plants are quite small, so that you could grow a good many in a garden two feet square.

We have not said anything yet about the edging of your garden, because you are quite likely to find that ready-made. Tiles have the merit of keeping clean and tidy; a Box edging is pretty, but it has to be clipped neatly, and it affords shelter to snails and slugs. Turf requires much attention, and wears bare easily. The best edging is one of rough stones laid well into the soil, and with soil worked into the spaces between them. In case you have not seen these edgings, and yet can get some stones, we had better explain that each stone should be wedged as firmly as possible into the ground, but not covered; then in the pockets of earth between the stones you plant all kinds of tiny creeping plants, and these soon make a charming border. We will give you the names and habits of some in the chapter on rockeries. Do not, at any rate, have an absurd border of little pebbles, as they get out of place at once, and look untidy.

CHAPTER II

ANNUALS

By annuals we here mean flowers that bloom in summer from seed sown in early spring. Out of a long list we shall choose twelve that are all easy to grow and last in flower a long time. From these twelve you must choose again, for there would not be room for many in a small plot, and if you crowd them none will do well. It is a great mistake to think that people who can grow nothing else successfully can manage annuals. All the good seedsmen know how often they are blamed for failures when the amateur, or even the professional gardener, should blame himself. He has sown on ill-prepared soil, or too deeply; he has let birds eat the seed, or slugs and snails the seedlings; or he has sown too much seed, and been too lazy to thin out properly. Small birds are dreadful thieves in





some gardens, and if you find them in yours you should put little twigs where you have sown your seed, and stretch a maze of black cotton from one twig to the other. They soon get to know that the cotton is there and keep away.

The twelve annuals we have chosen for you are:

- 1. Sweet-peas.
- 2. Mignonette.
- 3. Clarkia.
- 4. Malope.
- 5. Godetia.
- 6. Larkspur (*Delphinium*).
- 7 Love-in-a-mist (Nigella).
- 8. Nasturtiums.
- 9. Sunflowers.
- 10. Shirley Poppies.
- 11. Alonsoas.
- 12. Eschscholtzia.

For most seeds that are sown in the open ground you must wait till the end of March in the South of England, and till the first or second week of April in the North. The old saying that 'a peck of March dust is worth a King's ransom' will teach you something about sowing

seeds. It means that you want your soil to be in a workable state, not hard with frost or sloppy with heavy rains, but friable and just moist with a light spring shower. When these pleasant spring days come, your work in the garden begins in earnest, and so does your pleasure. Some of the bulbs you have planted in autumn will be flowering; others will be pushing their way up towards the light; and your herbaceous plants—those that died down in the autumn-will be coming up again, and making delicious young green leaves. The part of your garden that you have saved for annuals must be carefully hoed and raked now, so that all the weeds are destroyed, and the soil made fine and powdery for your seedlings. Their little roots could not strike down and get any hold in hard, big lumps of earth, and it would be a waste of money and time to sow seed there. You should remove all stones and weeds, and break up the lumps of earth with your rake. surface of your seed-bed, when ready, should be quite smooth and fine. If the seed to be sown is small, mix it with double its own quantity of sand, or dry sifted earth, as that helps you not

to sow too thickly. Do not choose a windy day if you can help it, or your seeds would blow away. For a big patch of seeds it is best to take your hoe and draw shallow trenches, one inch deep and twelve or fifteen inches apart. When these are ready, take the seed in your hands and carefully dribble it in as evenly as you can. When you have finished, rake the earth smoothly over the trenches again, and pat it gently in place. You should always put a stick or a label where you sow seed or set bulbs, as it is easy to forget what one has done, and put things on the top of each other.

In favourable weather some of your seedlings will show their seed-leaves in ten days or a fortnight, but others will take longer. The first pair of leaves are what botanists call cotyledons, and those that come after are unlike them. You will soon get to know both the cotyledons and the other leaves of the plants you grow. You can often tell your seedlings from weeds by observing a whole colony of new-comers exactly alike, where you have placed a stick or a label. As soon as you can handle them they will want carefully thinning, and when you find

out how troublesome it is to thin a patch of Poppies properly, for instance, you will understand why we advise you to mix all your small seed with sand, and only to put a pinch into the ground. Firms that sell penny packets of seed tell you that there are two thousand seeds in some of their packets. Poppy seeds nearly all come up, and a well-grown plant should have a foot of soil to itself. So if you made a hedge of poppies all along one side of your border, you would use seven seeds out of two thousand. All gardeners sow more seeds than they mean to use, because they must allow for accidents and insects, and they expect to do some thinning. But the ignorant gardener invariably sows his seed too thick, and leaves his seedlings too close together; so he gets a crowd of starved, stunted plants that do not flower well, and are soon over for the year. You should begin by leaving three inches between your seedlings, and end by giving most of them a foot apiece. Some will require more room, some rather less, and the best way to please them is to watch them constantly, and make sure that each little plant has room to expand. In thinning seedlings you must be most careful not to disturb

the roots of those you wish to leave, and when you have sown too thickly this is difficult. Some seedlings will bear pricking out in another part of the garden; some, such as Wallflowers, actually like it; while others will not stand it at all. You should do your pricking out in showery weather.

Pricking out means taking up all your seedlings and planting them in rows to grow bigger. will tell you as we go on which flowers should be raised in this way. Seed that is to be pricked out is usually sown in a box or a shallow earthenware pan with holes in it, or in the ground under a bell-glass. Any grocer will give or sell you an empty soap or sweetmeat box that will do for It should have one or two holes bored in the bottom, and a few potsherds or bits of broken brick for drainage. The soil should be sifted and moist. A bell-glass is a dome of glass with a knob at the top, and should be about twelve inches across and ten inches high. You can get one for eighteenpence at a china-shop, and you will find it useful if you have neither a frame nor a greenhouse. You may put it on half-hardy plants at night to keep the frost from them, or on newlysown seeds to hurry them on. In very cold

weather you would leave it on plants all day, but slip a bit of wood under one side to let air in for an hour or two at noon. When you use it for seed, you do not move it until the seedlings appear. You should not prick out your seedlings until they have made four leaves besides the cotyledons. When you grow seed in pans or boxes, you do not thin out the seedlings, so they will probably be close together. If they are dry you should begin by watering them with a fine rose; then take your hand-fork, put it in close to the plants you wish to remove, dig it well down, lift gently, and a whole group of plants will come up with a lump of earth.

Break the seedlings gently apart, each singly. Great care must be taken not to bruise the plants or tear the tender roots. When you have separated about a dozen, plant them out, and as you do this consider how much space will be required for each. Snapdragons and Marigolds should be a foot apart, but Lettuces can do with nine inches, and Violas with rather less. Sometimes seedlings are pricked out into neat beds in a reserve part of the garden, and transplanted later to the borders where they are to flower. Some-

times they are put out at once into their permanent situation. This is partly a question of habit and partly of room. When a plant is not going to flower till next year, you would rather keep it out of your show border this year, so if you have a nursery border you let it grow up there. If it is going to flower in a few weeks, you may as well give it a good place at once and leave it alone. Then, again, some things are the better for the check of transplantation, while others recover with difficulty or not at all. In gardening it is easier to make general rules for the gardener than for his plants. He must be as wise as a good doctor, and find out what treatment different plants require, what food, what surgery or medicine, and what stimulants; and he must even learn, just as a doctor must, to apply his general knowledge to his special case. For instance, the very Geranium that he has taken into his greenhouse every winter in Yorkshire may be planted against the south wall of his house if he lives in Cornwall, and trusted in a few years' time to reach the roof, and give him flowers for his Christmas dinner-table. All that he knows about gardening must be influenced, and sometimes considerably altered, by his own local conditions of soil, aspect, and climate. You must remember this when you buy your seeds in the spring and your bulbs in the autumn, and choose those that do well in your neighbourhood. You should always observe what plants other people near you are growing in their gardens, and what conditions they give them. In that way you can learn a great deal about the management of your own.

SWEET-PEAS.

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

We like to remind you of these charming lines by Keats, because then you will always think of them when you look at your own Sweet-peas on a summer day. But our business is to tell you how to grow them, so that they are ready for the poet when he comes by, and we do not begin with a summer day, but with one at the end of winter, when the seed lists come and set you thinking of spring. Sweet-peas have become such a popular flower of late years that we have heard people talk of the 'Sweet-pea world,' by which we suppose they meant the growers who cultivate the many new varieties and the rare shades. When you are grown up you will have to decide for yourself whether you belong to any of these 'worlds' in the florist's sense of the word. We have never had the least desire to grow a black Tulip or a blue Rose, but there is no doubt that when 'fanciers' take up a flower they improve it for a time. If you gave up gardening for ten or twelve years, and then began again, you would find that there were new varieties of some of your old favourites, and that the sorts you used to grow were not admired now. The most popular and well-known flowers all have such a history. Your grandmother would remember when every Dahlia in the garden was as stiff as the modern little Pom-poms, but much bigger. Then, about twenty-five years ago, the single Dahlias ousted the stiff ones, and now we all grow Cactus Dahlias, with long pointed, twisted So with Sweet-peas. Fifty years ago no one wanted anything but a mixed clump, some of which would be mauve or purple, some

marbled, and some pink. Now it is usual to grow each colour by itself, and every year we seem to get better colours and bigger flowers. The fanciers of the 'Sweet-pea world' have taken Sweet-peas in hand, and by careful cultivation and selection have given us many new and beautiful varieties. At first novelties are dear, because the stock of seed is small, but for a few pence you can have a hedge that would have rejoiced Keats; and if you are a wise child, you will certainly grow those that have become plentiful. We will give you the names of some varieties that we like best, but you will easily understand from the little we have told you that some years hence our list will probably look old-fashioned. Even to-day anyone you happen to know in the 'Sweet-pea world' might make a different choice. The names we give you are the names of the Sweet-peas we like and have grown with success.

- 1. King Edward VII. (vivid red).
- 2. Gorgeous (orange-salmon).
- 3. Blanch Burpee (white).
- 4. Navy Blue (violet-blue).
- 5 Lady Grizel Hamilton (mauve).

- 6. Mrs. Collier (yellow).
- 7. Lovely (pale pink).
- 8. Miss Willmott (salmon-pink).
- 9. Black Knight (maroon).
- 10. Countess Spencer (wavy pink).
- 11. Nora Unwin (frilled white).
- 12. Gladys Unwin (pale pink).

Sweet-peas grow very tall if they are healthy and properly staked, so they should be sown all along the back of your border to make a hedge. If you buy a packet of some expensive variety that gives you only a few seeds, you might sow those separately in a circle.

The best month for sowing is March, and you must dig your trench six inches deep and three inches wide. If there are many mice about who would eat your seeds, it is a good plan to soak them in paraffin a few minutes before sowing. Gardeners often damp them and shake them in powdered red lead, but as this is poison it must be used with care. It is not always effectual, either. We once saw a mouse caught 'red-handed,' his little paws coated with the lead we had put on our seed to protect it from him. When your

trench is ready, sow your seed singly all along the row, leaving two inches between each seed. If your two borders are each seven feet long, you would sow forty-two seeds on either side, so you see that you can only grow a few kinds in one summer. When you have sown them, do not cover them with all the soil you have dug out. They should only have three inches on them at first, because the seedling wants to find its way up to the spring sun. Later on, when it is a strong plant, and supported by a twig, you can put back the rest of the soil. Sweet-peas are very thirsty plants, and when the long dry days come they like to have their roots deep down in the moist earth.

Their two great enemies are slugs and sparrows. In or near a town where sparrows swarm, you cannot grow Sweet-peas at all unless you protect the young shoots when they first show above the ground—about three weeks, that is, after the seed is sown. Later, when the leaves expand, the birds leave the plants alone. You can buy either ready-made pea-guards or a length of wire-netting, which should be doubled in the middle and put over your row like a long tent, with sticks at

either end to keep it firm. If you cannot have wire put a double line of sticks at intervals along your row, and wind black cotton across and across from one stick to the other. This terrifies the sparrows, and they will not go near it. If you have many slugs, you should keep the ground near the seeds sprinkled with soot or lime. As soon as the plants are three inches high, they should be thinned to six inches apart, and should have a row of small twigs stuck all along the line for their tendrils to seize. When they are a foot high, you can earth them up with the soil left on one side of the trench, but you must put it evenly on either side of your Peas. When they reach the top of the little twigs, the tall ones must be put in firmly on either side of the row, and by the middle or end of June your Peas should be in flower. If you want your plants to last in flower all the summer and well into the autumn, you must not let them form a single seed-pod. Every day you should cut both your fresh flowers and any withered ones you see. In dry, hot weather they should be well watered at the roots from a can without a rose. Give each plant a soak of water at the roots, and do not trouble about the

leaves. We emphasize this advice because Sweetpeas after they are six inches high suffer easily from drought, and we know that many children think they have given a plant a drink if they spray its upper leaves with a fine rose. You might as well give a thirsty baby a drink by splashing its face.

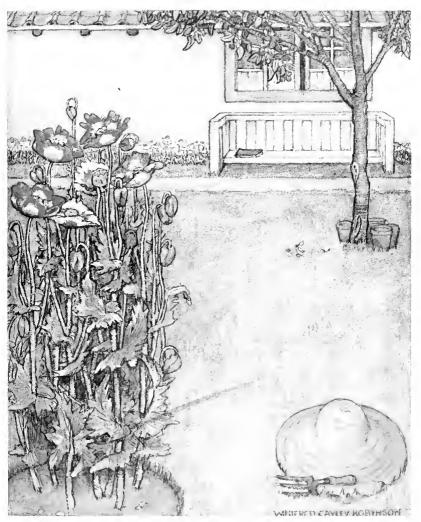
To grow Sweet-peas in a clump, take out the earth from a circular patch that you can mark with a garden sieve or a big flower-pot. Sow from eight to a dozen seeds, and thin to four plants when you feel safe from slugs and sparrows. Treat them just as you do those grown in a hedge, but when you put in your tall stakes make them all slant a little towards the centre, so that they meet at the top. The Hazel branches that you get easily in many neighbourhoods are best for Sweet-peas. Where these are scarce, you must use what you can find. The wire hurdles recommended for garden Peas where stakes are scarce would answer, but they are expensive and ugly. If your garden is not airy and sunny, it is a waste of time and money to try Sweet-peas. They are impatient of shade, of starved soil, or of a crowded garden. If they come up at all in

such conditions, they will never do well, and will most probably be devoured by green fly.

MIGNONETTE.

You are sure to want some Mignonette in your garden, because it is so fragrant; but in choosing a place for it you must remember that it will not make a splash of gay colour in the border. It grows from ten to twelve inches high; but, as you do not tie it up, it should be sown in front of plants whose stalks are not really longer, but which require a stake. It likes a good loam, but it will grow in almost any soil if it gets enough sun. Do not give it fresh manure, or it will run to leaf. It is one of the few annuals that should be sown in firm, hard ground. We do not mean ground that is hard because it is poor and neglected, but well dug soil that you tread or press down to make it ready for your seed. When you have done this, you sprinkle the seed thinly, cover it with half an inch of fine earth, and pat that down firmly with your hands or your trowel. You should choose a fine April day for your first sowing, and you should reserve a little seed for a second sowing in case the first is a failure. This some-

times happens even when your seed comes from a good firm and you sow it properly. It is a great mistake to buy poor Mignonette seed, as often none of it comes up. In ten days or a fortnight a soft spring rain will bring up the little plants, and then, if you have sown too thickly, you will find out how troublesome it is to thin them; but you will not have fine Mignonette unless you do this ruthlessly. Crowded plants will give you stunted flowers. The best way is to fix your eye on a seedling that is outgrowing its brothers, and remove all that are near it, taking great care not to disturb or loosen the one you wish to keep. You should watch your Mignonette and thin it out several times, so that each plant has room to breathe and grow. Six inches at least should in the end be left between the plants, and then you will only have left half the distance recommended by many good gardeners. So you see what a tiny pinch of seed would give you all the plants you need. Mignonette must be sown where it is to bloom, as it has a tap-root, and will not stand transplanting.



POPPIËS,



CLARKIA.

This annual comes to us from California, and is very pretty and easy to grow. But it likes a good soil. On a dry, starved one we have seen it so poor that we hardly knew it was Clarkia, and yet these miserable dwarfed specimens came from the same packet of seed that had grown into a bed of lovely pink and salmon-pink sprays two feet high in another part of the garden. your border has been well prepared and is sunny, your Clarkia seed is sure to do well in it. You can sow it either in a large patch or in little drills or trenches ten inches apart, and it should be covered with one inch of fine soil. The centre of the bed would be a good place for it. Sow in April, and thin out the small plants to six inches between each. There are a good many varieties. We recommend Salmon Queen and Carnation Flaked Pink.

MALOPE.

This annual, if well grown, is about two feet high, and should be in the centre of your border. It has large red, white, or pink trumpet-shaped flowers that bloom at intervals amongst the leaves of the tall stems. It is most useful for cutting, as it lasts in water a long time, and is decorative. It likes good soil, should be sown in April half an inch deep, and patted down firmly when sown. As soon as the seedlings can be handled they must be thinned out; but there will be none to thin if you cannot keep away slugs. Many gardeners recommend you to dust the young plants with soot or lime.

GODETIAS.

These, too, are useful for cutting, and can be grown in a variety of delicate colours. We think that Sutton's Double Rose and Crimson King are two of the best. The sprays of the Double Rose are like Oleander flowers. They are not quite as tall as Malope or Clarkia, but should be treated in the same way, and if well grown will be tall enough for the centre of your garden.

LARKSPURS.

In 'The English Flower Garden' Mr. Robinson says that 'the annual Larkspurs are so little used in gardens that it is only in seed-farms that we have the pleasure of seeing them now and then

in all their beauty.' You can have them in various heights and colours, and for early or late flowering. The earliest flowering ones are the Dwarf Rocket Larkspurs, and the pink ones are beautiful flowers. They are twelve inches high. If you buy seeds of the taller kinds, you must put them towards the back of your border, for they grow three feet high. Of these the Rosy Scarlet is the best.

NIGELLA.

This is one of the most beautiful annuals there is, and its charming English name is Love-in-amist. Be sure to get the variety called Miss Jekyll, after the celebrated gardener. The flowers are a delicate yet vivid blue, surrounded by fennel-like leaves. They are easy to arrange for the room, and last well in water. The seed may be sown in March to bloom in June, and again in April or May for a later display. The seed-pods that succeed the flowers are ornamental, and those that ripen early in the summer sow themselves and flower in the following year. Some people say they can transplant Nigella, but many gardeners prefer to sow it where it is

to stand. Thin out when the plants can be handled, as each one left, if well grown, will cover a square foot.

NASTURTIUM.

Everyone knows Nasturtiums, and the most ignorant gardeners can grow them. But they are so beautiful that good gardeners make room for them, too. They succeed best on poor soil. If you give them rich soil, they 'run to leaf,' as gardeners say, and do not produce many Even in a London square they will make a gay corner, provided they get sun. You probably know that there are two kinds—the dwarf ones, growing about nine inches high, and the Giant Nasturtiums, that will climb to the top of a tall fence, and cover it in the course of the summer. The seed should be sown at the end of April where it is to flower. We have transplanted Nasturtiums with great success, but it is not usually recommended. Sow each seed separately in a little hole two inches deep that you make with a stick. If you want a whole row of them, sow two quite near each other, then a foot farther on another pair, and proceed in this way

all along your row. When the seedlings are up you can remove one of each pair, and you will not have an ugly gap in your row where a single seed has failed.

SUNFLOWERS (HELIANTHUS).

If you have a small garden full of delicate flowers, we should advise you not to grow Sunflowers at all. A group of them looks well in a shrubbery or at the back of a mixed border, and we have seen them used with admirable effect in a straight row, standing like sentinels on guard behind all the other plants in the bed; but they take up room, and require a great deal of food. If you want them, and your garden was not dressed in the autumn, some well-rotted compost should be dug in for the Sunflowers in spring. The young plants will not stand frost, and are usually raised in heat; but you can grow them quite successfully under a bellglass, or, in warm parts of England, in the open ground. If you mean to raise them in this way, you must wait till quite the end of April or the beginning of May. The big seeds should be covered with an inch and a half of soil, and if

you sow where they are to stand, put two close together to provide against failure. If both come up and live, the smaller of the two can be removed. Slugs devour the young plants if they can get at them, so you should put a little soot round each one. They need strong stakes, as most of them grow to a great height, and are easily blown down. There are some, however, that are not more than four feet high, and have a great many small flowers useful for cutting. Stella and Primrose Stella are good dwarf varieties.

SHIRLEY POPPIES.

If you happen to have a rough bank or a piece of waste ground where nothing much will grow, you can make it bright with annual Poppies, and if you let them seed themselves, they will come up in quantities year after year. They prefer a light soil to a heavy one, and they must have sun. It is of no use to sow Poppy-seed in a shady garden. In the border the amateur gardener invariably sows too much seed, and when it comes up his troubles begin. Poppy-seeds are small and cheap, and as a rule every seed germinates. You sow it in fine soil, and

either cover it lightly or just rub it in with your hand. If you have not been careful to sow only the tiniest pinch mixed with sand, you will soon see the seedlings as thick as cress above the soil, and if you leave them you will not have any good plants, as Poppies want room to grow. They have tap-roots, and will not transplant, so you must thin them hard, leaving them at least six inches apart. Shirley Poppies have delicate stalks, and when you grow a clump in your garden, you should put a few stakes amongst them, and tie them with raffia or string, as otherwise they get beaten down and spoiled by a summer storm. The seed should be sown at the end of April. The Shirley Poppies have most beautiful colours, and they will last some time in water if you cut them when the buds are just beginning to show colour. Wilks's re-selected Shirley is one of the best varieties. The Peony and Carnation-flowered Poppies make larger and stronger plants than the Shirleys. They should be sown in the centre of a small garden, and will make a great show in July.

ALONSOAS.

The Alonsoa, or Mask-flower, comes to us from Peru, and is a most satisfactory annual because it is easily grown and goes on flowering until the winter frosts come. There are several varieties, and one of the best—the Alonsoa Warscewiczii—has a name you remember because it is so queer, but will never know how to pronounce, unless you have Polish or Russian friends to tell you. Its flower is bright scarlet, and if you look at it closely you will see that it is like a small snapdragon. You must be careful to put a label where you sow it, and watch for a colony of seedlings all alike, because the seed-leaves of the Alonsoa are very much like one of our commonest weeds.

ESCHSCHOLTZIA.

These are often called Californian Poppies. They are white, pink, and various shades of yellow, and they have feathery green foliage. They succeed in almost any soil, and may be sown either in spring or autumn. Slugs and snails do not like them, so if you are much troubled with these pests you should certainly have some

Californian Poppies. They will seed themselves in most situations, and the same plant will often flower a second year. They are described in seed catalogues as nine inches high, but though they really grow rather taller than that, it is not usual to stake them. At the same time, these and many other flowers inclined to straggle a little may be supported with great advantage, just as Sweet-peas are, by a few branched stakes of Hazel or some similar wood. When you treat a non-climbing plant in this way, your stakes should be rather shorter than the plant, and artfully hidden by its leaves. No tying is necessary where these branched stakes are used.

Messrs. Sutton and Sons, of Reading, have consented, at our request, to sell three collections of flower-seeds suitable for children's gardens.

The first collection will cost 2s. 6d., and will contain twelve varieties of annuals and biennials.

- 1. Nigella, Miss Jekyll.
- 2. Sweet-pea, mixed.
- 3. Mignonette, large-flowered.
- 4. Malope, Pink and White.
- 5. Antirrhinum, intermixed (biennial, unless brought on early in heat).

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- 6. Nasturtium, Dwarf, King of Tom Thumbs.
- 7. Clarkia (Salmon Queen).
- 8. Shirley Poppy.
- 9. Annual Larkspur.
- 10. French Marigold (half-hardy).
- 11. Sweet William (biennial).
- 12. Wallflower, Dark (biennial).

The second collection will contain six varieties, and cost 1s. 6d.

- 1. Nigella.
- 2. Sweet-pea, mixed.
- 3. Mignonette, large-flowered.
- 4. Malope, Pink.
- 5. Antirrhinum, intermixed.
- 6. Nasturtium, Dwarf, King of Tom Thumbs.

The third collection will contain four varieties, and cost 1s.

- 1. Nigella, Miss Jekyll.
- 2. Sweet-pea, mixed.
- 3. Mignonette, large-flowered.
- 4. Malope, Pink.

CHAPTER III

HARDY PERENNIALS

A PERENNIAL is a plant that comes up year after year, and increases as it grows older. will tell you how to grow fourteen of the best, and when you have succeeded with those you can find hundreds more described in 'The English Flower Garden' and other well-known Your parents and grandparents can remember when all the beautiful herbaceous or perennial plants were hardly to be found in gardens, and everyone was content with the straight rows of red, blue, and yellow, the ignorant gardener will still inflict on you if you let him. In those days bulbs were planted in autumn and dug up in spring, to make way for Geraniums, Calceolarias, and Lobelias. Everyone grew the same things, had an ugly clash of colour at the same moment, and bare brown borders for the

greater part of the year. Then came some of the great gardeners of thirty years ago, who set the gardening world ablaze with their reforms and their audacities. They told people how dull and stupid their gardens were, and how to make them beautiful and interesting. It was not their fault if some of their disciples ran away with the idea that a herbaceous border was the easiest thing in the world to manage, and were grievously disappointed to find that it was not. As a matter of fact, the incompetent gardener and the local nurseryman had known very well what they were about all the time. It is expensive, but not difficult, to stuff your borders full of Dutch bulbs in November, and full of little plants out of pots in May. You could do it yourself with money and a length of string tied to two sticks, for you must get your lines straight. But, then, think of all the beautiful plants you would never see in your garden—plants that, to come to their full beauty, must be left undisturbed until they show you who understand them that they are ready for your attention, and require fresh soil or possibly division. In most gardens there are some beds that are planted

twice a year, because a show of spring and autumn colour is wanted in them; but in all gardens managed with any skill or knowledge there are now also herbaceous borders, where you will find all the plants we are going to tell you about, many other perennials for which we have no room, and some annuals, hardy and half hardy. The finest bit of gardening known to one of the authors is the herbaceous border at Hampton Court, and she must admit that she knows neither the Palace nor its pictures nearly as well as the noble groups of plants that all through the summer and autumn make a blaze of colour there. If you have any good garden of hardy perennials within reach, you should visit it at different times of the year, and try to learn some lesson about the habit and arrangement of the plants. You will come back to your own garden in despair, but that is better for you than staying at home and being too easily satisfied. It is well to know the best that is done in any art or industry one tries to practise.

The hardy perennials we are going to describe will flourish in any English garden that has good, well-dressed soil, and is open to the sun part of the day. In choosing which you will grow you must consider their colours, their height, their flowering season, and the rate at which they increase. You should not give a delicate-looking plant like a Columbine a coarse spreading neighbour that will choke it. Nearly all herbaceous plants are greedy feeders, and require a deep, well-dug soil. If you cannot have manure worked in, perhaps you can buy a little bonemeal and soot. In any case, you should dig the ground well over before planting, break up hard lumps, and remove large stones.

HARDY PERENNIALS.

- 1. Polyanthus and Coloured Primrose.
- 2. Delphinium, or Larkspur.
- 3. Oriental Poppy.
- 4. Iris Germanica.
- 5. Perennial Lupin.
- 6. Japanese Anemone.
- 7. Aquilegia, or Columbine.
- 8. Peony.
- 9. Œnothera Fruticosa, or Evening Primrose.
- 10. Gypsophila Paniculata.
- 11. Sweet Lavender.

- 12. Early-flowering Chrysanthemums.
- 13. Violet.
- 14. Michaelmas Daisy.

PRIMROSE AND POLYANTHUS.

There are more than a hundred kinds of Primrose, or Primula; nearly all are hardy, and many grow in clusters on a single stalk. We are only going to tell you about the common Polyanthus, which grows in big clusters, and about the coloured garden Primrose, which is mostly found with single flowers, like the yellow Primrose of our fields and hedges. Perhaps you have heard of Peter Bell, and how

'A Primrose by the river's brim A yellow Primrose was to him, And it was nothing more.'

We have met many a Peter Bell, who stared at us in amazement when he saw us planting corners in a wild garden with what he considered hedgerow weeds.

But nowadays people who have gardens try to see with the poet's eye, rather than with the eyes of a Peter Bell. In the moist, shady places of your garden you may plant Primroses and Poly-

anthuses in colonies, and leave them to grow into great clumps and to seed themselves. But the best of them, those that you want to increase, you must pull to pieces when they have done flowering, and plant out in a shady corner. When you take up a clump you will usually see that it divides easily into several plants. You need not be afraid to use a knife in some places. Our experience is that every bit will grow, provided it has a few roots and plenty of shade and moisture during the hot summer months. When autumn comes you will have increased your stock without expense, and can plant out your young ones wherever you want them. If you want blue Primroses, division is more certain than seed. But it is a most fascinating business to grow Primroses from a good strain of seed, and not too difficult for a child to manage. You must get one of the empty sweetmeat or fancy soap boxes so invaluable to gardeners, and ask someone to make half a dozen holes in the bottom with a gimlet, or even a nail. Put in broken crocks and fine moist earth, just as we told you to do for annuals; then sow and lightly cover your Primrose or Polyanthus seed, put your box

in the shade, keep off slugs, and possess your soul in patience, for the seed takes a long while to germinate, and you may not see any tiny crinkled leaves for weeks. When you do see them you must wait till they are large enough to prick out, and even then we advise you to take them up carefully and keep the box of soil for a time, as backward seeds often come up later. Fresh seed will germinate more quickly than last year's, so you can either buy a packet in June and wait some time for results, or you can sow your own ripe seed in August, in which case your little plants should be big enough by the end of November to survive an ordinary English winter. If you sow in June, you should be able to prick out a good many little plants in August (on a damp day), and these will be ready for a front border by the following spring. When you prick out put the little plants in rows three inches apart each way; choose a shady place, and look out for slugs. It may be necessary to dust with soot or lime. Primroses and Polyanthuses make a charming border, either by themselves or mixed with other hardy plants that flower in spring, such as Aubrietias, the yellow Alyssum, and Iberis; or they look well in clumps on a rockery. If you have a whole row of them in front of your border, you should, if possible, take them up when they have done flowering, and, if they are worth keeping, put them in some shady unseen corner through the summer months. The hot sun makes their leaves yellow and shabby-looking, and if you can shift them you can have a summer edging of some dwarf annual or bedding plant. For instance, when you take up your Primroses you can sow your Tom Thumb Nasturtiums, or, if you are near nurserymen, you can buy some dwarf Snapdragons or some blue Lobelias. We would never have a straight row of anything but Sweet-peas if we could help it, and in a mixed border such as yours even they would look better grown in the round clumps. But we warn you that this question of rows or clumps is a burning one, about which even the two authors of one book are not always agreed. You will have to fight it out with your garden and your gardening friends.

DELPHINIUM, OR LARKSPUR.

Everyone who grows any herbaceous plants grows some Delphiniums, because they make a

fine background, and are such lovely shades of blue. Mr. Robinson says they range from one to nine feet high, but we think yours will probably be from three to four feet high, and that you should put them at the back of your border, with white Lupins, Starworts, and Evening Primroses. They flower in June and July, and make large clumps if left undisturbed for several years. There are two ways of prolonging their flowering season. You can cut off each flower before it begins to form seed-pods, or you can cut down the whole plant when its leaves begin to look shabby, and let it start afresh, as it did in the spring. But this would exhaust your plant if you did not give it extra food; so if you cut it down, it should have a little liquid manure. A teaspoonful of Clay's Fertilizer to a gallon of water would do very well. Delphiniums like manure, but they will grow in almost any soil, and are easy to raise from seed—at least, the seed germinates easily. They can be sown in May if you buy the seed, or in August if you wait for your own to ripen. You sow them in a box, and prick them out when large enough to handle. When they are a year old they begin to flower, but a plant does not

make a good clump till it is two or three years old. The culture of Delphiniums would present no difficulties if slugs were not so fond of them. In some gardens it is almost impossible to grow these beautiful flowers, because the slugs devour both the seedlings and the young shoots of the older plants the moment they appear. You must not put them in places where slugs can hide easily and come out at night to feed. If you want to increase your stock by division, you should do it either in spring or in damp summer weather, about a fortnight after you have cut your plant down. The autumn is not a good time. If you live in a cold climate you should give your Delphiniums a little protection in winter, but this is not necessary in most parts of England. Anyhow, when spring comes and open weather, take care that your covering of dead bracken or manure is not protecting slugs.

PAPAVER ORIENTALE, OR ORIENTAL POPPY.

Papaver Orientale and its variety Papaver Bracteatum are the biggest of all Poppies. The flowers are brilliant scarlet, with a deep purpleblack spot at the base of each petal. If you gather the buds just as they are about to burst, they will live in water for several days. After the plants have flowered they should be cut down, and they will reappear in the autumn. They have long tap-roots that are easily injured, but where they flourish they spread laterally—that is, they send up young plants at the side. These you can take up. Whenever a plant has a root like a carrot, it is called a 'tap-root,' and you must be careful not to break it. Poppies are easily raised from seed, but the plants will not flower till they are two years old. When you take up your seedlings, remove each one with as much earth as possible, and plant it where it is to remain.

TRISES.

Roughly speaking, Irises may be divided into two classes—those you grow from bulbs, and those that have rhizomes, or creeping stems. The bulbous Irises are often called Xiphions, and will not be considered in this chapter. There is a great variety amongst those that have rhizomes, or stems. They vary a good deal as to the soil and conditions they require. Some like damp, some hate it; some want stiff soil, some a light one; manure that feeds one Iris will poison another; and as for their blooming season, it extends throughout the year if you have a large collection. The Iris is sometimes called the 'poor man's Orchid,' because it can be grown without trouble or expense, and has such beautiful and curious flowers. We will tell you the names of a few that you can get at any good nursery garden; but before you plant them you must consider that each kind is only in flower for a short time, and that for the greater part of the year a clump of Irises is a clump of swordlike leaves. They are sometimes placed amongst roses or in front of shrubs. The best known of all is the Iris Germanica, or German Flag. There are many varieties, and there is hardly a garden in or near London without some clumps of it, for even in soot and smoke it will increase and flower. The beautiful white, pale mauve Florentine Iris is the French Fleur-de-lis, and was freely planted in English gardens when the Bourbons were restored in 1830. It increases rapidly, and is easy of cultivation. Iris Stylosa is one of the most valuable, because it flowers

in winter, and is very fragrant. Then, some of the dwarf Irises are most beautiful, and should have a corner in front of your border or on your rockery. Iris Pumila or its varieties grow some inches high, and flower in spring. Iris Olbiensis and Iris Chamæris belong to this group, and in warm localities flower at the end of April or early in May. These kinds all thrive best in an open, warm situation. Irises are easily divided in the autumn, but each piece should have an eye to grow from, a little knot or knob that is on the rhizomatous root. If you want your Irises indoors, you should gather them in bud, and arrange them and some of their leaves in a bowl, with the help of some soft lead and a few stones. You can get the Japanese lead at most big shops now for a few pence, but any ironmonger could supply you with strips of thin sheet-lead. A pennyworth of copper wire twisted into a tangle is even better, but this is not so generally known.

LUPINUS POLYPHYLLUS ALBUS.

There are blue and white Lupins, and both kinds flower at the same time and require the same treatment. We advise you to choose the

white one if you have blue Delphiniums, as they will come out together, and make your garden gay all through June. Slugs are very fond of Lupins, and you often find a fine spike just about to flower half eaten away. Unless you want to increase your stock from seed, you should cut off the flowers as they fade, in order to prolong the flowering season. The plants may be left undisturbed year after year, and will make large clumps that grow from three to six feet high. If you take up a Lupin you will find it has huge tap-roots, and on this account it is not an easy plant to transplant or divide. When you want to move them, you must do it in the autumn, after the leaves have died down. The seeds come up easily if you sow them in a box, and the seedlings flower the second year; but if you have blue and white Lupins, the seed from your white Lupin will produce many washed-out blue flowers.

WHITE JAPANESE ANEMONE.

This is a large white Anemone with golden anthers. It begins to bloom in August, and goes on right through the autumn, long after our summer flowers have gone. Any bit of root you can buy or get given will grow, but when once you have planted it you should leave it alone year after year. It hates being disturbed, and will only make the huge flowering clump you want when it is well established. It likes a rich soil, and grows very well in half-shady places.

AQUILEGIA, OR COLUMBINE.

If you gather the flower of a Columbine and look at it upside down, you will see why people say it is like little doves drinking, and how it gets its name of Columbine from the Latin word for dove. In some parts of England they grow wild, but the beautiful orange, yellow, and scarlet ones come from America, and the blue and white Alpine ones from Switzerland and the Pyrenees. In our climate they are uncertain as perennials. You may have a garden where they live for years, or you may find that your good ones die off every year. They like well-drained, well-nourished, rather light, moist soil, and a half-shady position. If you have heavy clay land, you will probably not succeed well with them. Where they are happy they seed themselves easily, and you see a whole colony of tiny plants coming up round their parent; so be careful how you weed near a good Columbine after it has flowered. These seedlings may be left till the spring, and then planted where they are to stand. The best way to acquire a stock is to buy a packet of seed of the long-spurred varieties, and to manage them as we have told you to manage other seeds of perennial flowers. If you sow in June you should be able to plant out in autumn, and one of the great growers tells you to put three plants in a triangle three inches apart, but we think this is too near. As the leaves die down in winter, you should put labels where you set your plants. When you have a great many seedlings from a mixed packet, do not keep only the biggest and strongest specimens, or you may find next summer that you have all one colour. Some of the choicest varieties look rather small and weak when they are young.

PEONY.

When Keats talked of the wealth of 'globèd Peony,' he was thinking of the old-fashioned red ones that make such a splendid splash of colour

in a garden, but were out of favour at one time because they were considered too flamboyant for people with refined tastes. Your grandmother would have looked disapprovingly at a hoyden whose face was as red as a Peony, and she probably thought the flowers very well in a cottage garden, but not in her own. But in these days of hockey and lawn-tennis Atalanta's face may be as red as she pleases—no one will call her a hoyden; and the Peonies are no longer globed, but wide-open and wide-eyed, like an Anemone, and lovely shades of palish pink and white. You can still grow the old red one if you wish. It is called 'officinalis,' and, like all Peonies, should have four feet of space allowed for the bush it will make in two or three years' time. Some of the most beautiful new ones are half single, with a mass of golden stamens in the centre, and many are sweet-scented. They should not be planted on an east border, because then the sun catches the dewdrops still on the blooms, and converts them into burning glasses. They will grow in any rich soil and in any position, but if you give them moderate shade their flowers last longer and are more intense in colour. It is a good

plan to pinch off the buds of your first-year plants, so that all the strength goes into the roots and leaves. You may leave them undisturbed for years, but if you can top-dress them in autumn so much the better. Peonies form large woody roots, with little knobs or crowns on them. They may be divided in autumn by carefully cutting apart the roots, leaving several crowns on each piece. These should be planted only two inches below the soil.

EVENING PRIMROSE (ŒNOTHERA FRUTICOSA).

There are a good many varieties of the Evening Primrose, and one of the most common will be described in the chapter on Biennials. The Œnothera Fruticosa is a true perennial, and as it flowers all through the summer, it is a useful plant to have in your border. It grows about two feet high, so it should be placed about the middle, with taller plants behind it. All Evening Primroses like a warm, sunny position, and a good sandy soil. 'Fruticosa' is easily raised from seed sown in the open ground in June, and pricked off when large enough to flower next year. It may also be divided in spring or autumn.

GYPSOPHILA PANICULATA.

This forms a little bush of tiny white flowers, and sprays of it are charming when mixed with other flowers. It thrives in any soil when once it is established, but it dies quite down in winter, and shows itself rather late in spring; so you must be sure to mark it with a label in the autumn, and look out for slugs when the new leaves push up. We have found it a most difficult plant to transplant or divide, and we strongly advise the inexperienced gardener to leave any specimens he has alone. Gypsophila Paniculata can be grown from seed sown in the open ground in May, and moved into the flowering border in September; but you are not likely to want many plants of it, and we think you would find it more satisfactory to buy two or three from one of the many nurserymen who raise it in large quantities.

SWEET LAVENDER.

This plant is a small perennial shrub, and not a true herbaceous perennial; but we think that every child will wish to have at least one Lavender bush, if not more, in the garden. If you choose

you can make a charming hedge of Lavender mixed with little pink monthly Roses. You can easily increase your supply by taking cuttings in August and planting them in light sandy soil. You must make a slanting slice across your cutting just beneath the joint, take off every scrap of green leaf from the lower part of the stem, and plant firmly three inches deep in sandy soil. They should strike and make good roots by the following spring. Lavender may also be grown from seed sown in boxes in April, and kept covered with a glass till the little plants appear. This may take some time, and you must be careful to keep the soil moist by watering with a fine rose. When your plants are an inch high, prick out in rows and leave them for a year. By the second year they should begin to bloom. Gather your flowers for keeping on a dry day, and just before they are fully expanded.

EARLY-FLOWERING CHRYSANTHEMUMS.

Many of these are quite hardy, come up year after year, and require little attention. All chrysanthemums are greedy feeders, and like a rich soil, improved by farm manure. In summer

you can, if you choose, give them a watering with liquid manure made by a teaspoonful of Clay's Fertilizer to one gallon of water.

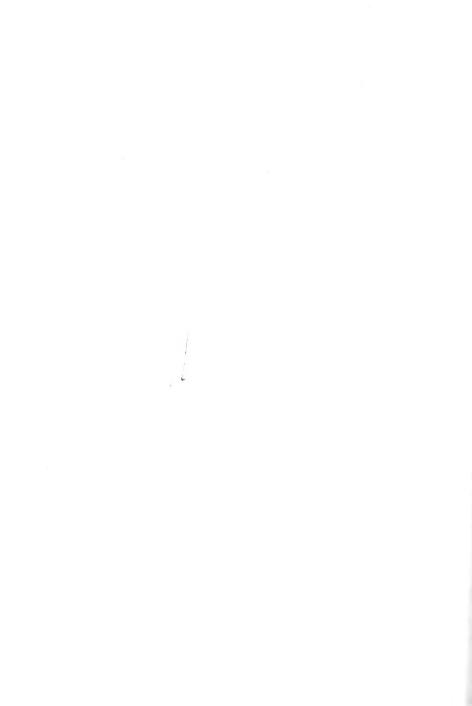
About the end of October, when the flowers all look shabby, or have been gathered for indoor use, your plants should be cut down to within an inch of the ground. This helps the new growth from which you may want to take cuttings. You must wait till the young shoots are six inches high, and then cut them off close to the ground with a sharp knife. The leaves must be removed from the lower half of the stalk, and you must make a clean cut across the stalk just below a joint from which leaves have been taken. You can put six of these cuttings in a five-inch pot, or a large number in a wooden box; and remember that cuttings root better close to the edge of a pot than in the middle. They should be set two inches deep, and firmly pressed in, and the soil should be fine and mixed with sand. The pots or boxes must then be placed in a cool frame or greenhouse. The less you water cuttings the better, but a sprinkle may be necessary sometimes to keep the soil moist. In six weeks the cuttings should have rooted, and begin to make little new leaves at the top. These may then be pricked out singly into small pots. Do not put young plants into the open garden until the spring frosts are over. If you have no frame or greenhouse, and yet want to increase your Chrysanthemums, you can take them up at the end of March, divide them with a sharp knife, and replant the pieces. A gardener who tried this way wrote to Gardening Illustrated to say that the chrysanthemums he divided came into flower earlier and made stronger plants than the orthodox cuttings. He took his up in February and March, and put his pieces in a frame for a few weeks. But if you have no frame, you had better wait till the winter frosts are over.

VIOLETS.

Violets will make no show in your garden, but if you have room you will wish to have some of your own to gather. You must put out of your head some of the things the poets say about them, and remember that they like a rich soil, the sun in early spring, some shelter, and plenty of light and fresh air. We have seen them belying all the pretty traditions about their



LARKSPURS AND PINKS.



modest and retiring ways. They were scrambling in sheets over the granite walls of a Cornish garden, and, so far from hiding, they were showing their pretty faces to the sun, and saying as plain as plain, 'This is what we like. Don't stuff us into shady dells and enclosed, sunless places.' So now we put them where they will have rich soil, sun and air, and the moisture they require. A south border would be too dry for them in summer, but they will stand a good deal of sunshine if their roots are in rich soil. You must watch for their runners, and cut them off all through the summer, but later in the year you should leave some for stock. In May or June you can increase your Violets-either by taking up your plants and pulling them carefully to pieces, when every bit with roots will grow; or you can put some runners under a hand-light in a shady border. If you cut off their tips, you will be able to see when they have struck and begin to grow, and then you must tilt your hand-light a little, so as to give ventilation. After a short time you can take it away altogether, and by September your cuttings should be ready to plant out. The rows should be one foot apart.

The plants will soon spread, and should be kept well weeded. All gardeners advise you to make a fresh bed every two years. There are many beautiful varieties. In a Cornish garden we have known the fine double kind, Marie Louise, bloom incessantly from August, through the winter and spring, till the hot weather came again; but this variety would need a frame in a cold climate.

MICHAELMAS DAISIES, OR STARWORTS.

You must be sure to have some of these in your garden, because they are easy to grow and come into flower in September, when many things are over. They are delightful, too, for cutting, as they last well in water and look well in any size or shape of bowl or glass. The only complaint people ever make of them is that they increase too fast, and take up too much room in the borders. We have had the best flowering clumps sometimes from patches we have dug up in autumn or spring, pulled to pieces and divided. But a clump may be left year after year, if con-There is all the difference in the world venient. between Michaelmas Daisies grown in rich soil and good air and those grown in starved conditions.

We have seen an inexperienced gardener buy a collection from good nurserymen, plant them in a bed of starved, poor soil on the east side of a suburban house, and then be surprised that her Starworts made no growth, and were not worth looking at. And, as it happened, we saw a handful of Aster Amethystinus taken from those miserable conditions to a sunny, sheltered garden in West Cornwall, where it was pulled to pieces and planted in good soil all along a low granite wall running north and south. In October a whole row of healthy plants was looking over the wall, and sending up masses of clear mauve starry flowers; their very colour and size improved out of knowledge by the change. Michaelmas Daisies lose much of their beauty if they are tied up in untidy bundles; but it is impossible to avoid tying them if they stand in an open border where they may be caught by autumn gales. They look very well amongst shrubs, or if you have a fence or a wall you can put them all along it. Drive a stout stake in at either end, and tie a strong string or length of coir rope so as to catch your Starworts at the height that will best support them. If you must have unprotected clumps,

be sure to stake and tie them as soon as they are tall enough, and before they flower. There are many beautiful varieties. Four of the best are Amellus, Acris, Cordifolius, and Vimineus.

STAKING.

This is such an important operation that we must give it a paragraph to itself. You must try from the beginning to tie up your plants when they require it, and to do it in a workmanlike way, but you will often find it a difficult and troublesome thing to do well. We once saw an amusing picture in a gardening book of how not to tie up a plant, and many a time have we remembered it after a hot and weary struggle with our own. Some plants are more easily and successfully supported by the branched stakes that need no ties; but heavy plants, such as Dahlias, Sunflowers, and Michaelmas Daisies, require strong pointed sticks, either those cut from trees or the square green ones to be bought in towns. You should hammer your stake firmly in just behind the plant. Never drive one straight through its heart. Consider to what height your plant will grow, and do not mind if the stake is

too tall just at first. Tie it carefully with raffia, or, if you want something stronger, with thin cord. Roughly speaking, we should say that raffia is strong enough for plants that can be supported by the little round stakes sold in bundles, but that plants needing the square Dahlia stakes also need strong ties. If you support your plants while they are young, you must look at them from time to time, because as they spread and grow they will want fresh ties and sometimes fresh stakes. A spreading, top-heavy plant often needs three or four stakes to support it properly. You will not think your trouble has been thrown away, however, when you find that a three-days storm has not done much damage to your garden, because your plants were so carefully prepared for it.

CHAPTER IV

BULBS, CORMS, AND TUBERS

A TRUE bulb has a series of layers, or scales. An onion is a bulb, and so is a Hyacinth; so are Lilies, though of a different kind. A Crocus, a Gladiolus, and a bulbous Iris, are all corms. They are solid, and could not be pulled to pieces in scales. A tuber is a thick fleshy root that increases as the plant grows, and ripens when it has done growing. Dahlias and Begonias have roots of this kind; so have many Anemones and many wild flowers. Certain tubers are good to eat. You have one kind for dinner whenever you have Potatoes, and another kind when you have Jerusalem Artichokes.

Some people buy fresh bulbs every year, and pull up the old ones directly they have done flowering. We think that if you are a reallytruly gardener, you will not wish to do this. You will want to see some of your bulbs come up year after year, with increasing strength and beauty; and you will want to take up others at the right time, divide them or store them, as the case may be, and replant. But if you do mean to grow your bulbs year after year and increase your own stock, you must remember that for many weeks after the flowering season you have masses of untidy-looking dying leaves. Therefore you must plant as artfully as you can in places where other things will be growing up close by and attracting attention. The leaves of bulbs must not be removed until they are quite dead and come away with a touch, and this does not happen until the summer sun has baked them for a long time. While they are green the bulb is getting strength from them. We shall only tell you about a few varieties that are inexpensive to buy and easy to grow. When you have learned to manage these successfully, you can try some of the many others you will find in catalogues and in gardening books. advice to you is to spend your money on one or two kinds every autumn, and not to buy a collection. This applies especially to children who have a corner of a London garden, because the collections always include some bulbs (such as Anemones or the Persian Ranunculus, for instance) that are not quite easy to grow, and would do nothing in the town border.

Snowdrops (Galanthus).

If you have any shrubs or trees in your garden, you can plant your Snowdrops near their roots; and if they like the soil and the situation, they will increase quickly. They are very fond of peat, but they will grow well in any healthy soil, and they may be left undisturbed year after year. There are many varieties. One of the largest is Galanthus Elwesi, but it wants a sheltered spot and a light soil. If you plant your Snowdrops in clumps near Crocuses and Winter Aconites, put at least fourteen or fifteen in a clump, and set them rather close together. The bulbs should not touch, but there should not be more than the breadth of your thumb-nail between each. Beginners nearly always set their bulbs too far apart, and then the clumps or rows look stinted.

CROCUSES.

Another mistake that even older people often make is to think about buying their bulbs about a month after they should have been in the ground. There is a 'best time' to plant and a time that will 'do.' The best time to plant spring flowering bulbs is the end of September. The difficulty is to find places for them then, when your border is still gay and crowded. But some of the summer flowers will be over, and can be thrown away, and others will be cut down later, and can have some bulbs tucked under the soil not far from their roots. Crocuses like to be planted about three inches deep, and they may be left undisturbed year after year. You could put clumps of them on your rockery or in front of your border, and plant Siberian Squills, winter Aconites, and Snowdrops near them. Then when April comes, you could sow Mignonette or Nasturtiums just behind the dying foliage, and in time the summer flowers would spread and fill up the bare places for you. There are seventy species of Crocus, and many bloom in autumn. Some of these are wild now in various parts of England, though they probably came long ago

from the Pyrenees. You will find the springflowering ones most useful for your border; but though they are easy to grow, you have to watch for their two enemies—mice and sparrows. eat the corms, and sparrows pull the flowers to pieces in order to get at the stamens, that affect them as a sedative. It is generally found that they do not attack the striped ones. If you are troubled by sparrows you must put little twigs near your crocuses and wind black cotton from one to the other. Crocuses seed themselves freely, and take from two to three years to flower. You can also lift them in June, and separate the young corms from the parent one; but you must not expect these very small corms to flower the following year.

SIBERIAN SQUILLS (SCILLA SIBERICA).

The flowers of this little bulb are a most vivid sapphire blue, and you should certainly have some either on your rockery or in front of your border. They like a sandy loam, so if you have a clay soil you should get some sand and plant your bulbs in it. Set them two inches below the surface any time from July to September.

They will increase if left undisturbed, or you may lift the bulbs in June and carefully separate the little offsets.

NARCISSUS, OR DAFFODIL.

If you buy bunches of these flowers you find that the man who sells them to you calls some Daffodils, some Narcissi some Polyanthus-Narcissi, and some Jonquils. But when you look at a gardening book or a bulb list, you will find them all under the head of Narcissi. There are hundreds of varieties, and some are difficult and delicate, while others increase quickly in We fear that the little London good soil. gardener will find that his Daffodils flower the first year, and never send anything up again except green leaves; but in the country the strong kinds, such as Emperor or Horsfieldi, have been known to increase twentyfold in two years.

The best time to plant these bulbs is in August or September, but when they are to replace summer-flowering plants they have to go in later. Any good garden soil will suit the Daffodil, but a stiffish loam is what it likes best. The

bulbs should never come into direct contact with manure, but if your soil is very poor you could have some dug in nine to twelve inches deep. There is some diversity of opinion about the depth at which to plant, but we have good authority for saying that from two to five inches is enough. At St. Lov, the well-known Cornish flower-farm, the manager believes, after many careful experiments, that deep planting is a strain on the bulb, and weakens the growth. If you are afraid of hard and prolonged frost, it is better to give your Daffodils a winter blanket of manure, dead leaves, heather, furze, or ashes, whichever you can conveniently procure. This must be removed when the bulbs want to push through the ground. In June and July, Daffodils lose both roots and leaves, and may be taken up for division. The rule about division is quite simple. When you see a baby bulb wrapped up to the neck in the sheath of the parent bulb, you must not take it away, but plant them again together. It is only when the young bulb has its own sheath that you may detach it carefully at its basal root where it still touches the old one. When you want to separate bulbs, do not tear them asunder. Press them gently together, and if they are ripe for separation they will come apart easily.

When you have dug up those you want to divide, knock off as much soil as you can, and leave the bulbs to dry for a short time in the sun, or on a shelf in a shed or in a cool room. But it is advisable to plant the young bulbs directly they are detached from the old ones.

If possible, when you replant your bulbs, give them a fresh place—or, at any rate, fresh soil. When you cut your Daffodils, never cut many leaves from one plant, because the bulb receives nourishment through its leaves. The flowers may be gathered when in bud, and will come out well and increase in size in water. Many people always send Daffodils by post in bud, as they travel better, take less room, and last longer. Besides, a mixture of fully-open and half-open Daffodils is like spring itself, and gives you pleasure as they change and expand. But the growers tell us that the shops and markets will not buy them in this state, and insist on having the flowers in full bloom.

The Polyanthus-Narcissus has several flowers

on one stalk, and it is very fragrant. There are several varieties, and in the South and West of England they are all hardy. In the sheltered parts of Cornwall and the Scilly Isles they come into flower before Christmas, and all through January you see fields of them opening their buds in the winter sun. If you live in a cold part of England, you must give them a sheltered corner and plenty of sand in the soil. Three good kinds are Soleil d'Or, a bright yellow; Grand Monarque, white and pale yellow; and Gloriosa, white and orange. The Polyanthus-Narcissus does better than other kinds in a stiff soil, and it likes a little manure.

The variety of Daffodils in a bulb list is bewildering, but you must learn enough about the leading kinds to choose, for instance, whether you want a huge yellow trumpet, a hoop petticoat, a star, a double, or one of those enchanting tiny ones that would get lost in a mixed border, and must be given a choice corner in your rockery. In this chapter we will give you the names of a few well-known and inexpensive kinds that are effective in a mixed border. When you plant them in this way amongst other flowers, you can put six in a clump, three inches apart and three to five inches deep. They should be placed eighteen inches from the path, well behind your Snowdrops, Crocuses, and dwarf Alpines. You may like to choose those that flower late, and put them near pale blue Hyacinths or deep orange Tulips. In that case, buy Emperor, Empress, or Bicolor. The earliest trumpet Daffodil is Sir Henry Irving; Golden Spur comes a little later. Bicolor Grandis is what the catalogues call 'the best all-round Daffodil'; Sir Watkin is 'a giant of noble appearance'; and Horsfieldi is pure white and yellow, the finest of the early Bicolors. All these are single Daffodils.

The Poet's Narcissus, or the Pheasant-eyed Narcissus, blooms later than the Daffodils. These are what the flower-shops give you when you ask for the single Narcissus, and they have strongly scented, pure white petals, with a short yellow cup that is edged with red. If they like your soil they will increase at a great rate, and if they don't they will flower the first year, but never again. We have known them spread like a weed in a Yorkshire garden in a good rich loam, and we have seen them doing well in pure sand. At

Les Avants, in Switzerland, there are vast fields of them, and when they are in flower the scent is overpowering. They should be gathered just as the buds break, because the sun soon bleaches the lovely orange and yellow of the 'pheasant eye.'

HYACINTHS.

Hyacinths should be planted nine inches deep and six inches apart. Five or six bulbs of the same colour make a pretty clump, and they should be from twelve to eighteen inches from the edge. You may leave them undisturbed year after year, and in good soil they will increase and flower. If you wish to take them up, you must wait till the leaves are dead, and then dry the bulbs carefully in the sun before you store them in sand till the autumn. The offsets, if cultivated in light, rich soil, will flower in three years; but Hyacinths raised in Holland are stronger than any you are likely to raise yourself. Until you are an experienced gardener, we advise you to leave your clumps undisturbed as long as they flower, and to buy new bulbs when you find that your old ones seem exhausted.





DAFFODILS

GRAPE HYACINTH (MUSCARI).

These are charming little blue or white flowers, growing about six inches high, and flowering in April. They are hardy and easy to grow, but you must be sure to put a good many in a group, so as to get the best effect with them. Plant them two inches deep and about two inches apart. The bulbs are easily increased by lifting them every two or three years when the leaves are dead, and removing the offsets. They like any soil except a very damp one, and they look well in front of your border or in your rockery, near some of the miniature Daffodils.

TULIPS.

Tulips are easily grown in any good garden soil. Where the land is stiff and not well worked they die out. The proper time to plant is from October till the middle of November, and, if possible, you should give your Tulips shelter from wind, as their heavy heads, brittle stems, and broad leaves are easily damaged. They should be planted three inches deep. The ordinary garden Tulips may be roughly divided into two kinds—

early and late flowering—and of these there are many varieties. The well-known scarlet and yellow Duc van Thol and all its family are early, and will flower in April. The late ones flower in May and June, and come from Tulipa Gesneriana. There are so many kinds and colours in Tulips that we will not give you names, but leave you to choose your own from any good catalogue. Perhaps you would like to try some of the Parrot Tulips, which have large flowers, most curiously coloured and flaked. Tulips, unlike most bulbs, may be lifted directly their leaves turn yellow, dried in the sun, and stored in a dry, airy place, where mice and rats cannot reach them. Most kinds are increased by offsets. You can, if you choose, leave your Tulips in the ground two or three years, but after that it is well to take them up and divide them. If you do not, the bulbs get crowded, and do not flower well.

EARLY AND LATE FLOWERING GLADIOLI.

There are two kinds of Gladioli that we think you can grow in your garden. One is the wellknown Scarlet Brenchleyensis, that flowers in autumn, and the other is an early-flowering dwarf variety called Nanus.

The early-flowering ones are white, pink, salmon, and crimson, and in good garden soil they increase freely. They should be planted in November, and you must remember that they will need protection from frost during their first winter. Except in very hard weather, the established bulbs need no covering. They like a light loamy soil and a sunny situation. When you have chosen a place for them, set the bulbs, three inches deep and seven inches apart, in clumps of about twelve, and have ready some dead leaves and ashes to keep each clump warm. These dwarf varieties may be left undisturbed two or three years, but as they increase quickly they will not flower well longer than that unless you take them up, when the foliage is dead, and divide them. The well-known white one, The Bride, belongs to this section.

The finest autumn-flowering variety is the splendid scarlet one — Brenchleyensis. It is taller than the summer kinds, and should be placed about the centre of your border. Each stem should be carefully tied to a stick when it is

about to flower, or a high wind may snap it in two. This Gladiolus should be planted in the spring, about four inches deep and twelve inches apart. When the leaves have died away in the autumn, the bulbs should be lifted, dried, and stored in sand for the winter. In the South and West of England the bulbs are often left in the ground, but even there they should be protected the first winter. Every two years they should be lifted and divided.

MONTBRETIAS.

A beautiful little South African flower, like a small Gladiolus. If you live in a mild climate it will increase like a weed, and your trouble will be to keep it down. In a heavy soil or where there is much frost you must give protection. But the chief thing to remember about Montbretias is that they will not flower unless the clumps are frequently divided in autumn. Some growers recommend that it should be done every year.

IRISES.

The Spanish and English Irises want conditions that not everyone can give them. They like

shelter without shade, drought in autumn and winter, moisture in spring, sun in summer, and a light, friable soil. If you have a light soil and a south wall, you should certainly put some of these beautiful flowers in, and do not meddle with the bulbs as long as the plants are doing well. Plant at least three inches deep and five inches apart.

WINTER ACONITE (ERANTHIS HYEMALIS).

The Winter Aconite is welcome because it comes so early in the spring, and even pushes up its bright yellow flowers, surrounded by a whorl or ruffle of glossy leaves, through the snow. It will grow in almost any garden soil, and is a good plant to put under shrubs or amongst ferns, as it does not mind shade. It can be increased by dividing the tubers in September; but if your Aconites do well, you can leave them year after year and let them manage themselves.

ALSTRŒMERIAS.

These are beautiful orange-coloured Peruvian Lilies, and if you have a light, well-drained soil you will find them easy to grow. If your soil is heavy you must dig in leaf-mould, sand, and well-rotted cow-manure. A warm, sheltered, sunny position suits them best. While growing and blooming they should be watered sometimes, or the plants get too dry. As they go out of flower you should remove the seed-heads, as when they all set they exhaust the plant; but do not cut the stems or leaves, because they are wanted to strengthen the tubers for the following Their stems are so strong that they do not require stakes. They should be planted from six to nine inches deep and twelve inches apart, and once established, they should never be disturbed. When the young shoots of the Alstræmeria appear in spring, slugs must be kept away.

BEGONIAS.

Begonias used to be little grown in the outdoor garden, but of late years you see them everywhere. We advise you to buy the inexpensive unnamed tubers in April from any good nurseryman. When your Begonias arrive you will find that they look rather like flattened, badly-grown potatoes, and if you see no little pink shoots on

them, you must put them in a shallow box of sand or sandy soil or cocoanut-fibre, and set the box on a dry light shelf till growth begins. If you can put your box in a cool greenhouse, so much the better. The soil must be kept just moist, but not wet, and the tubers must not be put out till the spring frosts are over. In cold climates this will not be till the end of May. When the time comes, choose positions in front of your border, and as far as possible sheltered from high winds, which would play havoe with their succulent stalks and broad, fleshy leaves. The soil should be well dug, and if it is heavy you must add sand, and, when you can get it, leaf-mould. Take up your tubers very carefully with a trowel, so as not to injure their fine fibrous roots, and plant them, with the pink shoots upwards, about four inches below the surface. Then you must watch your Begonias carefully, and when they appear above ground protect them from slugs by putting a circle of soot round each plant. You will find Begonias useful as successors to the spring bulbs that are over, and can be taken up for division or thrown away. In the autumn they must come out of the ground

before the frosts, and if the leaves and stalks are not quite dead, cut them off with a sharp knife; never pull at them, or you may injure the tuber. Some growers keep their tubers exposed in a light, airy greenhouse until the stalks and stems are so shrivelled that they will drop off with a touch. As long as they are not shrivelled, they constitute a danger to the tuber during its time of rest. Begonias must be stored in sand or cocoanut-fibre in shallow boxes, and kept in a frost-free place through the winter. They can be grown from seed or from cuttings under glass, but we think both operations are a little beyond the juvenile gardener.

Dahlias.

It is difficult to find room for Dahlias in a very small garden, but even one will give you a great deal of pleasure if you manage it well, as the flowers go on for a long time, and are most useful for cutting. Whether you have one or more, you must remember that the Cactus Dahlias grow from four to six feet high, and that each plant makes a big bush. The pretty little Pom-poms are rather shorter, and can be placed in front

of their big brothers. We advise you to grow these kinds, and not what are called show varieties, which are stiff and, we think, ugly. Dahlias are greedy feeders, and wherever you mean to plant one you should get someone to dig in manure eighteen inches down. About the end of April or early in May, according to the season and your climate, you put out your Dahlias. If they are spring-rooted cuttings in a pot, all you have to do at first is to take them out of the pot, plant them, and look out for slugs. They will devour every one if they can. If you are given a tuberous root, you must put it five or six inches deep in the ground. It is of no use to grow Dahlias unless you can stake and tie them properly. as they become very heavy, and are ruined by a high wind if unsupported. Stout, square green stakes are made on purpose for Dahlias, and if you are far away from a town where they are to be had, you must get someone to cut and point you natural ones equally strong. For Cactus Dahlias they should be five or six feet long, and for Pom-poms four feet; and at least one foot of this length must be driven firmly into the ground. Do not tie with raffia, but with stout cord or coir, as nothing else is strong enough. When the frosts come you can take up your Dahlias and store them in a dry cellar; but unless you have a gardener to help you, we do not think you could strike cuttings from them in heat, in spring. You will find in autumn that the little plant you put out of a pot in May has made a big tuber, with a number of fingers. These should be left as they are till spring comes again, and then they may be carefully separated with a sharp knife and put as they are into the ground. Each piece will make a fresh plant. In sheltered parts of Devonshire and Cornwall, Dahlias, after being cut down, are often given a little covering of straw and manure and left in the ground.

CHAPTER V

BIENNIALS

BIENNIALS are plants that do not flower till the second year after sowing. They are sown in spring and summer, pricked out when large enough, and transplanted, either in the autumn or the following spring, to their flowering places. If you can only have a small patch in a small garden, we advise you to buy, ready-grown, every spring, the few biennials you need. You can get all the well-known ones cheaply by the dozen, or just as they have been sown in a box. But if you are one of those lucky children who grow up in a big garden, we advise you to beg for a little extra bit for a 'nursery,' and then to try your hand at growing some of the easier biennials and perennials from seed. Some people will tell you that this operation is beyond the skill and patience of any child, but we think that if you will follow our instructions carefully you might succeed. Do not dream of trying all we tell you about in one season. In every chapter we speak of more plants than any one child could crowd into one small garden. You must choose some of your great favourites to begin with, and each year add a few new ones to the plants you have learnt to manage well.

Skilled gardeners grow some biennials, as annuals, by raising the seed in frames and greenhouses early in the year; but this, we think, would be too difficult for children to do without help. So you must, as we have said, buy your biennials ready-made, or you must get someone to raise them in heat for you, or you can sow your own seed one year, understanding that the seedlings will not flower till the next. Of these three plans we think the purchase of ready-made seedlings the easiest, but in some ways the least satisfactory. At any rate, if you must adopt it, try to get them from good nurserymen. Those you buy in the London streets or from advertisement columns are often grievously disappointing, so that when your biennials flower you discover you have thrown your money and your labour away. Your Snapdragons are either hideously splotchy or crudely magenta; your pink Canterbury Bells are blue and white; your Wallflowers are spindly and colourless. A few experiences of this kind will soon drive you to buy your own seed from one of the best firms, and for a few pence and some happy hours of gardening to get more plants of the best colour and quality than you can possibly use. Then you will have the pleasure the true gardener always finds in giving some of his plants away, or you can exchange your surplus stock for plants you do not possess yet.

Wallflowers (Cheiranthus).

This is a good biennial to start with, because every seed comes up and comes quickly. Sow thinly on a partly shaded patch of ground, and prick out when the seedlings have four good leaves. Do this on a showery day, if possible, and plant in rows ten inches apart each way. It is important to sow your seed early in the spring, because where the winter is severe the plants should be in their permanent quarters by May or June. If you transplant them late in the autumn,

they suffer greatly from frost. In London market - gardens the seed is sown early in February; the plants are put out in May, and by Christmas are in flower. A seedling Wallflower has a tap-root as well as fibrous roots, and this is why the seedling should be pricked out once before it is transplanted to its permanent quarters. If you left it where it was sown it would send down a great root like a carrot, and then when you tried to move the plant you would kill it. Many gardeners pinch off the tap-root when they prick out, and then the Wallflower makes fibrous roots that can be safely transplanted. Mr. Robinson says that a well-grown Wallflower in a London market-garden could not be covered by a bushel basket, so now you know what size your plants ought to be, and how many you will have room for in your border. If you buy them ready-made late in the autumn, you will probably find that each plant has two bare, lanky stalks, with a miserable little bunch of leaves at the top; and when a frost comes they will look so dejected that you will pull them up and throw them away.

Pansies and Tufted Pansies (Viola Tricolor).

The Pansies, or Heart's - ease, and Tufted Pansies (known to nurserymen as Violas) can be treated as annuals, biennials, or perennials, according to position, climate, and soil. In a Cornish garden from October to Christmas we had Pansies in flower from seed sown at the end of May, so they were annuals. But we had put them in their permanent places that autumn, because we wanted them to live through the winter and make the border gay the summer following, when they became biennials. At the end of the summer we kept the best of them to flower another year, and, if they liked, a year after that.

The seed should be sown in early summer in light, moist, leafy soil. It soon comes up, and when the seedlings have three pairs of leaves they should be pricked out. The Pansy, like the Carnation, has a tiresome trick of producing its best flowers on its poorest plants, so you must be patient and careful with the weak, backward ones, because they may give you the finest

blooms. Pansies would rather be moved in autumn than in spring, and remember that they like a rather shady place in your border, and a good loamy soil. They either die or make poor little flowers in hard, dry ground. If you want your Pansies and Violas to go on flowering all the summer, you must be careful to pinch off the dead flowers. The roots you see in London shops and markets, wrapped in hard clay and showing two or three big flowers, will not do much good as a rule. If, however, you have some, and want to keep them alive, you should soak the cake of clay off the fibrous roots, plant in a puddle of water, and protect from the sun and wind for several days with a flower-pot. We have been told by a well-known gardener that she can make anything live by planting it in a pool of water, and out of our own experience we would say that we can make most things live by shading them for some days, except from showers, with a flower-pot. It is most interesting to see how a flagging plant will revive after a few hours of shade and shelter.

If you have a light, warm soil, you can easily strike cuttings from your best Violas and Pansies.





IRISES

One way is to cut them down in June. A month later a number of young shoots will appear, and these should have soil put amongst them into which they will root themselves. In two or three weeks you can take away these young plants and put them in a nursery bed. A cutting should be set one-third of its length into a little bed of sandy soil that you have previously made smooth and moist. You must always slice them across the stalk just below a joint, and cut off the lower leaves. They should be taken in moist, warm weather, and placed in partial shade. As they grow pinch off the tops, and then they make more roots, and are stronger. We have no great gardening authority for saying so, but from our own experience we should advise you never to cut down a favourite plant for increase, except in showery weather. We have lost many by meddling with them during a drought. you only have a few Pansies you will not want to cut them down at all in June, but you can look out for young shoots, and try to take a few cuttings.

CAMPANULA MEDIUM (CANTERBURY BELL).

Canterbury Bells are most useful and beautiful flowers, and easily grown. If you want the lovely pink ones be sure to get your seed from a first-rate firm, as the cheap seed and the cheap plants are likely to be blue or white. Canterbury Bells are beautiful in blue and white, as well as in pink, and we only mean that for some reason the pink ones seem a little more difficult to get hold of. Sow your seed in shallow boxes in March or April; prick out in showery weather when the seedlings have four leaves, and transplant to their permanent places in September. You will find that the strongest seedlings will flower the following year, but the small ones take two years to mature. Canterbury Bells sow themselves easily if you leave the seed to ripen, but they flower longer if you pick off each bell as it withers. They require stakes.

SWEET WILLIAM (DIANTHUS BARBATUS).

One celebrated lady who writes about gardens says that she does not like Sweet Williams, because they remind her of the plush chairs in

German furniture shops. We think ourselves that the ordinary red ones are rather stiff and flaunting; but the new salmon-pink and deep rose-coloured ones are not a bit like red plush, and they make lovely patches of colour in our gardens; also, they are easy to raise and manage. If you grow them from seed, sow out of doors in April, prick out when the plants are large enough, and transfer to permanent quarters in September. Next year you can take cuttings from the best plants when they have done flowering. You are always told by skilful gardeners that a cutting should be sliced straight through the stalk just beneath a joint, and planted in sandy soil and slight shade to make roots; but now we will tell you how an unskilful gardener, who found cuttings difficult, increased her Sweet Williams with perfect ease. It may be the wrong way, but the Sweet Williams did not seem to think so. When they had quite done flowering, each plant had sent up a quantity of young green shoots that evidently did not mean to make flowers that summer; so the unskilful gardener took up her best clumps, tore each one into from twelve to

twenty pieces, planted them in fine, rather moist soil in partial shade, and by late autumn saw that every one was doing well and making a good plant for next year.

EVENING PRIMROSE (ŒNOTHERA).

A handsome, clear yellow flower, growing six feet high, and blooming for many weeks, but one of those that never know when and where they are not wanted. You know the true gardening rhyme, don't you?—that 'One year's seeding makes seven years' weeding.' We believe that when once the Evening Primrose has had a chance in a garden, its seeds will come up there till the crack of doom. However, they have tap-roots, and are easily pulled up. If you have none and want them, you should sow in June where the plants are to stand, and thin out severely, leaving two feet between the plants. Remember that in this chapter we are talking of biennials, that will not flower until the following year. If you have one of those heartbreaking gardens made of rough, starved soil or builder's rubbish, you might sow Evening Primroses as carefully as you can all along the back

of the border. Then, in the following spring, when your Evening Primroses are spreading plants, you could sow Giant Poppies in front of them, and Dwarf Nasturtiums in front of the Poppies. One of the great secrets of gardening is to find out how to make the best of your conditions, even when they are unfavourable.

SNAPDRAGONS (ANTIRRHINUM MAJUS).

These are most beautiful and useful flowers. They will do well in poor soil, and even on the tops of walls, where there is not much soil for them—in fact, some of the finest specimens, grown from self-sown seed, are to be found in such situations. There are three kinds: tall, medium, and dwarf, and there are a great variety of colours. Some are self-coloured, and some are mottled, striped, or flaked. If you buy cheap seedlings you get ugly magentas or poor, washed-out mixtures; while if you raise your own from good seed, you get most lovely shades. Snapdragons may be treated as annuals or biennials, and each has its own difficulty. If you treat them as annuals, you must raise the seed under glass in February, so as to have flowers in July. We think you probably have no greenhouse or frame of your own, so we will tell you how to grow Snapdragons out of doors as biennials. The difficulty in this case is not to get your stock of plants, but to keep them through the winter, as Snapdragons are not quite hardy, especially in a close, damp soil. We have heard of nursery gardeners losing their whole stock in a frost. On a light soil and near a south wall you can, with a hammer and nails and a few laths, knock up a wooden framework that will hold a piece of sacking or an Archangel mat over your plants, and keep the worst of the frost from If you can't use a hammer and nails, and live in a cold climate, we think you will have to buy your Snapdragons every spring.

The seed of Snapdragons is very small, so it is a good plan to mix it with sand or fine soil before you sow it. The sowing can be done any time between April and August, and either in boxes or pans, or in the open ground. If you have a struggle with weeds in your garden, we advise you to sow all seeds that will bear transplantation in boxes or pans, as you can dodge the weeds better in this way. We have heard of

people who poured a kettleful of boiling water over the soil they meant to use for seeds, so as to destroy the weeds in it first. If you do this, you must wait till the soil has passed through the soppy stage in which a flood of hot water leaves it before you put it in your seed-box. An old iron tray, no longer tidy enough for indoor use, is convenient for this and for many other garden operations. When your Snapdragons have four good leaves, prick them out in rows nine inches apart in the most sheltered corner you have, and protect them from frost till the spring, when they will make a show all through the summer in your border. You will find that some people get quite angry with you for growing tall ones or dwarf ones, according to the kind they themselves prefer, while other people will forbid you to look at a flaked or bizarre Snapdragon. You will have to bear this if you agree with us, and like both dwarf and tall ones, all the clear selfs, and even some of the bizarre. A 'self' in gardening jargon means one colour, as opposed to striped, flaked, or speckled.

Forget-Me-Not (Myosotis Dissitiflora).

There are several varieties of the Forget-menot, but you will find this a good kind to grow, either for your border or your rockery. It makes a charming edging for bulbs, or a carpet through which Tulips and Daffodils send up their leaves in spring. The seed should be sown from April to June, and pricked out into a shady place. In the autumn your plants can be moved to their flowering quarters. They look very well near White Arabis, a plant you can buy anywhere, or near the Yellow Alyssum.

Foxgloves (Digitalis).

Foxgloves are so beautiful that you will want to grow them even if you have a sunny, sheltered, well-dug, and well-dressed garden where anything will succeed. But they are one of the few flowers that will never fail you who garden under difficulties. They do not mind shade, and can be grown amongst shrubs, and even under trees. They do not mind poor soil, though they make a finer growth when they are fed, and they will endure the air of cities. When once they are

established in your garden, you have them for ever if you choose, as they seed themselves freely; but you cannot keep the pure white strain unless you either grow new ones from good seed or pull up every pink one before the buds open and let the bees into their flowers. The bees, as you no doubt know, are great gardeners, and fertilize your plants for you.

The seed of Foxgloves should be sown in June, either in boxes or in the open ground. You can prick them out to where they are to stand, or you can sow in their permanent quarters and thin to nine inches or a foot apart. Remember that they are tall plants, and must be at the back of your border. As you get three thousand seeds for a penny, you will have some over to sow in wild places.

STOCKS (MATTHIOLA).

These sweet-scented flowers make a display in your border all through the spring. They like a rich, well-dressed soil, and are generally poor and spindly on a starved one. The Brompton and Intermediate are good kinds to grow. Sow the seeds in summer in partial shade, and in

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moist weather plant out, nine inches apart, where they are to bloom. Make the soil firm round the young plants. Mr. E. T. Cook, in his 'Gardening for Beginners,' says that amateurs often make a mistake in rejecting the dwarf seedlings and keeping only the tall ones. The dwarf ones have more fibrous roots, and make more double flowers. The colours of Stocks have been greatly improved of late years, and if you get your seed from a good firm you need not grow the magenta ones you often see in small gardens.

CHAPTER VI

BEDDING PLANTS

By bedding plants we mean those plants that are raised in great quantities under glass, and are put out into our gardens in May. To be sure, you hear of 'spring' and 'summer' bedding, because in the autumn, when you take up your summer plants, you can fill your bed with bulbs and spring flowers, such as Stocks, Wallflowers, Primroses, and Forget-me-nots. The principal of 'bedding' is, you see, to plant your piece of ground, so as to have a good display twice a year. Every autumn you throw away your summer plants, and every summer you throw away your spring ones. This, at any rate, is what thousands of people with small town gardens do, and it is the form of gardening beloved of the jobbing gardener and the local florist. We recommend it to people who have

money, but take no interest in their gardens, and to small children who will find it the easiest form of gardening, and even to children who live in or near great cities where some plants will lead a merry life, but where none will lead a long one. But it is not a high form of gardening, and cannot teach you much as long as you buy every six months and throw away. Of course, when you raise and increase your bedders, either spring or summer ones, you are gardening in the true sense of the word. But most of the flowers you see in town gardens from May till October are raised in heat from seeds and cuttings, and we think the appliances and the skill required would be beyond you.

However, even from the throw-away-twice-ayear plan you can learn the gardening virtues of order and method, and you can get great pleasure from the flowers. Besides, you may be able to adopt it partly, and have some plants that go on from year to year, some annuals, and some you cherish for a season and then cast out. We will assume that in October someone gave you enough bulbs to make a fine show all through March and April, but that now in May their flowers are gone and their leaves looking shabby. If you are going to have bedders you must harden your heart, dig up all the bulbs, and throw them away. Then you must prepare the soil by turning it well over and raking it fine. If someone will fork in a little well-rotted stable manure, so much the better; if that is not possible, you can add a small quantity of Clay's Fertilizer.

Before you buy your bedders you must consider the aspect of your garden and the state and nature of your soil. Geraniums and Marguerite Daisies will stand rather poor soil, but Calceolarias, Begonias, and Heliotrope want good treatment if they are to flourish. If you have a wall at the back of your garden that is only partly covered, you should put nails a foot apart on either side and stretch string or wire across. Wire is more lasting than string, but more difficult to manage. The next thing to decide will be what colour effects you want, and for how many plants you have room. Geraniums need about a foot square each, Marguerites eighteen inches, Dwarf Marigolds nine inches. If you possibly can, buy your Geraniums, Calceolarias, Heliotropes, and Marguerites in little pots, and not

in boxes, or, worse still, in dried-up, rootless cuttings sent by post. It is an elementary piece of gardening knowledge that, provided you keep off slugs and give a little shade and water at first, you can put anything out of a pot at any time. But if you are going to have many bedders, you will save yourself a great deal of trouble by putting them out in showery weather towards the end of May.

Some of the best bedders for a small garden are:

Dark red and salmon-pink Geraniums; Scented oak-leaved Geraniums; White and yellow Marguerite Daisies; Heliotropes; Calceolarias.

All these can be bought in pots for 3s. a dozen. Dark red French Marigolds, Pansies, Violas, Petunias, Musk, and Lobelias can be bought in boxes holding from eighteen to twenty-four for 1s. or 1s. 6d.

Begonias, which may be had in all colours and look charming in front of a border, can be had for 2s. 6d. to 3s. a dozen,

In buying your plants always choose short, sturdy ones, with plenty of leaves, and not the tall, weak ones that have been drawn up under glass. If you have a wall, buy three or four ivyleaved pink Geraniums and a penny packet of blue Convolvulus Major seed. The Geranium will climb four feet in a season and the Convolvulus from four to six feet, and they will look well together. Do not be tempted to put in your Convolvulus seed till the May frosts are over, as you only lose by being in a hurry with this delicate annual.

Never take a plant out of a pot by pulling at it right side up. Always turn the pot upside down, with your hand covering the earth, but not the plant; then tap the bottom of the pot sharply with your trowel, and usually the plant will come out. Sometimes it is necessary to give the edge of the pot (still holding it upside down) a sharp knock on the top of a wall, or some other hard surface. You must, of course, be most careful not to knock the plant as you do this. If even then it will not come out, you must break the pot. When you have to do this you usually find that the plant has been pot-

bound, and is a mass of fibrous roots. Before you put the plant in your border remove the little pieces of broken pot at its roots, sink it slightly deeper than its own earth, and make the soil gently firm about it. If the weather is not showery, you must give your bedding plants a. good soak when you have put them in. Soft water (rain-water is always soft) is much better for plants than hard water from a tap; but if you cannot get this try to keep some hard water in a tub, so that it is exposed to the sun and air before you use it. The general rule is never to water plants when the sun is on them, but if we saw a plant flagging badly in the sun we should not wait till evening, but give it water at its roots, and, if possible, shade it. We should be careful not to let any water touch its leaves. When once your plants are well established do not water at all, except in a long drought. Then, if you begin, you must go on every evening till the rain comes. Geraniums and Marguerites do not like much water. Musk is very thirsty, and so are Petunias and Tobacco plants.

Be careful not to mix your colours in the ugly way often seen in London and suburban gardens.



You might have a row of white Tobacco plants at the back of your border, then one of yellow Marguerites, then Heliotrope, then Calceolarias and dark French Marigolds, then mauve Violas, and in front yellow Musk. Or if you want red and white, or red, white, and blue, you could try dark red Geraniums, then oak-leaved Geraniums, then white Marguerites, then dark red Begonias, and in front either blue Lobelias or the scarlet Alonsoa Warscewiczii, grown from seeds. Alonsoas are half-hardy, and should be sown in May. We think they might not do well in town gardens.

We must warn you that some people will be very angry with us for advising you to grow anything in lines. Lines are out of fashion, and they certainly have been made to give hideous effects by the ignorant gardener. But we make bold to think that a child who wants a blaze of colour all the summer in its small patch will get what he wants if he grows his garden as contrary Mary did, 'all in a row.' We will tell you now about a charming little garden belonging to two children in a London suburb. It is twelve feet square, and has a gravel path up the centre, with a tiled edge. At the back there is a seven-

foot wall, with a yellow Jasmine on one side and a white one on the other. Both kinds do well in town air, and the Yellow Jasmine comes early in the spring, when flowers are scarce and most welcome. The garden is shared by a brother and sister, and the boy, who is eleven, has made a seat against the wall of a four-foot plank, supported by two logs, each eighteen inches high. All through the summer the winter Jasmine is covered by a perennial pink Bellbine, that dies in autumn and comes up each spring. A pink ivyleaved Geranium and the blue Giant Convolvulus climb up the wall too, and mix with the summer (white) Jasmine, which flowers in masses. the side of each plot farthest from the path the children grow white and pink Foxgloves from seed, and the dwarf Sunflower Stella. In front of these they have a pink monthly Rose, with a Lavender bush on either side, and a bush of Lad's Love (Southernwood) on either side of the Lavender. In May they put in a row of white Marguerite Daisies; in front of these, clumps of dark red Carnations (flowers that thrive in town air), pink Geraniums, and pink Begonias, planted in clumps of three. In the foreground they have

an edging of blue Lobelia. All through the spring this little garden is gay with Narcissi and Daffodils, on which the children spend about ten shillings. The bedding plants cost about eight shillings, and make the garden bright throughout the summer.

CHAPTER VII

ROSES

EVEN in a small garden there should be one or two Roses, and as you may have to choose yours from a long bewildering catalogue, we will begin by telling you a little about the various kinds suitable for a child's garden.

HYBRID PERPETUALS.

There are some splendid and celebrated Roses in this class, but they have a shorter blooming season than Roses that do not call themselves perpetual. If, however, you live in the North, you may find that you can grow the H.P.'s, as Rose-growers call them, better than the more delicate Tea Roses. Ulrich Brunner and Charles Lefebvre are good old crimson ones, both fragrant. Duke of Connaught and Duke of Edinburgh are two of the best reds. Frau Karl Druschki is a

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splendid white Rose, but it has no scent. General Jacqueminot is another large crimson, so are Charles Darwin and Alfred Colomb. Mrs. John Laing is a soft pink. You must understand that we are only giving you a few names in each class, in case you are left to struggle unassisted with a catalogue containing hundreds of names. If you grow those we tell you of, you will have some beautiful Roses; but so you will if anyone who understands Roses chooses a different list for you.

TEA ROSES AND HYBRID TEAS.

If you live in a mild climate and have a sheltered corner for your garden, you should certainly grow the Tea Roses and their Hybrids, as they last in flower longer than the H.P.'s. Their season is said to be from May till October, but in a West of England garden we have gathered perfect specimens on a south wall at Christmas. Perhaps the best-known Tea Rose is the Gloire de Dijon, an apricot yellow that can be grown either as a bush rose or as a climber. Corallina is a lovely bright pink; Madame Lambard is bright rose; Maréchal Niel is the well-known golden-yellow Rose grown so often under glass.

We should say that he and Niphetos, a beautiful white Rose, are what some gardeners call 'miffy doers.' If you don't give them just exactly what they like, they either die or look so ill and reproachful that you cast them away. But if you can please them, they are very beautiful. So are Georges Nabonnand, a rosy white, shaded with yellow, and Catherine Mermet, a light flesh-coloured Rose of a globular shape.

Hybrid Teas are a cross between Teas and Hybrid Perpetuals, and are considered stronger than pure Teas. The best known of all is La France, and we cannot think why any catalogue should describe it as lilac. It is a rich pink, a lovely globular shape, fragrant, and one of those friendly Roses that flower from early summer till the frosts come. Madame Abel Chatenay is another Rose we recommend strongly. It is carmine, with shades of salmon. La Tosca is pink. Viscountess Folkestone is pale salmon, globular, and fragrant. Boule de Neige is pure white. Caroline Testout must not be omitted even from such a small list as this. It is pinkysalmon, large, globular, and fragrant.

CLIMBING ROSES.

There are many varieties that will climb, and we can only give you a few names of the most vigorous and beautiful. The old-fashioned Aimée Vibert is a white cluster Rose, very hardy and free-flowering. It is a Noisette, a scented cluster Rose; so is the William Allen Richardson, a popular apricot-yellow Rose that we should not choose, because its buds lose colour as they open. Dorothy Perkins is a pink cluster Rose, a Wichuriana; Lady Gay is a cherry-pink rambler; and the Crimson Rambler itself is one of the best climbers there is. The Waltham Rambler is a delicate pink, a most lovely cluster Rose-Alberic Barbier and Elisa Robichon are both Wichurianas—little climbing Roses, with dark, small, glossy leaves.

We think that you will only have room for two or three Roses in your little garden, and that you had better have either those we have already told you of or some of the China Roses, also called Bengal or Monthly. Even in the North of England we have seen them in full flower at the end of November. One of the best is Cramoisie Supérieure, and you can have it either as a bush Rose or as a climber. Another good one is the common Blush, a pink Rose that may be grown either as a dwarf or a climber. Little Pet is a white cluster Rose, and very dwarf. Mrs. Bosanquet is a pale flesh-coloured cluster Rose.

In 1840 Mrs. Loudon said that there were nearly 2,000 species and varieties of Roses. Even the well-known garden Roses are divided into so many groups that we cannot give you a complete list of them. Where people have plenty of room they grow the Penzance Briars, beautiful hybrids raised by Lord Penzance. Their foliage is as fragrant as Sweetbriar, and they have single or semi-double flowers. A wild Japanese Rose, Rosa Rugosa, makes a great bush that has glowing orange and red berries, but it is not suitable for a small garden. Then there are Moss Roses (very sweet-scented), Cabbage or Provence Roses (you find them in old-fashioned gardens), Scotch Briars (small flowers and such thorns! but very pretty), Austrian Briars, Banksia Roses, Damask Roses, Gallica or Provins Roses (from Provins, a small French town, and not to be confounded

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with Provence), Multiflora or Polyantha Roses (very small fairy Roses, that are having a vogue just now). These are a few you will often hear named, but you will find many more in any good Rose-grower's catalogue.

If you live in or near London, you will see a great many Roses grown on standards. You must decide for yourself whether you like them. We prefer a Rose climbing, or as part of a hedge or as a bush; but standard Roses are very popular with some gardeners, and when they are healthy they certainly carry a great many flowers.

Roses like a good firm, rich soil, what gardeners call 'unctuous loam.' It feels almost greasy between the fingers, and many plants love it. If your soil is light and dry, you must dig in some farm manure and, if you can get it, some clay before you plant Roses. If it is a heavy, cold clay, you should add lime, sand, and leaf-mould. In October the places for your Roses should be well dug and dressed, as November is the best month to plant. If you live where there is danger of autumn frosts, you should plant in the middle of October, or as

early in November as possible. We are giving you the general rule about Roses, but some gardeners like to plant in March, when the frosts are over. If you buy Roses in pots, you can put them out at any time except during a In hot summer weather you would naturally watch them at first, and give them shade if they seemed to flag. When you put a plant out of a pot, you must be careful not to disturb its roots and to give it plenty of water. If necessary, break the pot, as that would disturb the Rose less than shaking and shoving it. Go to a good firm for your Roses, and, if possible, one that will sell you Roses on their own We are not going to tell you about various grafted Roses, because we think that while you are a child you will find them troublesome, as they often send up shoots from the wild briars on which the Rose you want has been grafted; but we warn you that you will not get Roses on their own roots unless you go to one of the great Rose-growers.

When your Roses arrive, do not leave their roots exposed to the air a moment. Cover them with a sack or matting, and take a pail of water

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with you in which to dip each Rose as you plant it. Then make a hole about a foot wide each way, and just deep enough to allow you to spread the fibrous roots out to left and right of the stem. Hold the Rose in its place, and work a quantity of fine earth amongst its roots; and put the collar, the point at which the garden rose is budded on to the briar. from one to three inches below the surface. When you have put enough earth, tread it firmly down, and tie the Rose to a strong stake, so that the wind cannot shake it and worry its roots while they are trying to take hold of the soil. The best modern growers do not approve of manure as a mulch in winter. They say it does little or no good, and they prefer a loose soil surface. Soot dusted over the beds is beneficial, and so is a dressing of basic slag in the autumn.

It is no use to try to grow Roses in complete shade or where they will be choked by other plants. The Queen of Flowers will have light and air and some sun. She will let you set a few dwarf Alpines, Violas, or Forget-me-nots at her feet; but she will not be shouldered by high, coarse-growing herbaceous plants, or by

greedy shrubs. If your garden is not backed by a wall where you could have a climbing Rose, you might have an arch over your path. The ready-made wire ones sold by ironmongers will make all your fastidious friends shiver, and call you a Philistine; but you will forget that when summer comes, and it is hidden by flowers. Of course, if you are a country child, and can get the village carpenter to make you a wooden arch of small straight Larches or other young treetrunks, you will prefer it to any wire construction. The uprights must be set at least two feet deep in the earth, and firmly bedded in with stones. The horizontal piece must be secured firmly to the uprights. You would have a lovely arch if on one side you put Dorothy Perkins, the pink cluster Rose, with the white Clematis, Montana; while on the other side you might set a vigorous white cluster Rose called Félicité Perpétué, or Maids of the Village, with the wellknown purple Clematis, Jackmanni. The four would twine and mix with each other on the arch, and you would have flowers there from May till September.

When you wish to gather your Roses-or,

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indeed, any of your flowers—do it with seissors or a sharp knife. It is most distressing to see people violently tear off their flowers, and in doing so probably disturb the plant's roots. A Rose should be cut so as to leave the flowering shoot you will find just below it; otherwise you cannot expect a succession of blooms. Always pick off dead and faded flowers, and be on the look-out for curled-up leaves that have a little web of fluff in the centre. Underneath the fluff there is or will be a caterpillar, who will live on the foliage of your Roses if you do not destroy him. You must also wage war on aphides, which suck all the life out of the young shoots, mildew, and red-rust.

You often find that there is some confusion between spraying and syringeing plants, but you ought to understand that the two processes are different. A syringe can be bought for two or three shillings, and if you cannot afford a proper spray, you must use a syringe with your insecticides. It distributes the water either through a rose in tiny streams or in a single jet, and is meant for washing plants. A good spraying machine, such as the Abol, costs from eight

shillings upwards, and sends the liquid over the plants in a vapour that does not run off.

Aphides, or green fly, can be kept down if you spray them with tepid water in which you have mixed a little soft-soap; but when you have killed your aphides, you must syringe well with clear water, as the soap would not be good for your Roses. Another way is to boil an ounce of quassia chips in a pint of water, and when cold to add two gallons of rain-water; then spray. Many people clean their Roses with a double brush sold for the purpose, and called an 'aphis brush,' but they have to be most careful in using it not to injure the delicate young leaves the green fly always chooses.

If mildew appears, it may mean that your soil is badly drained or too wet for Rose-trees. It looks like little white spots on the leaves. You had better syringe or water your Roses, and while they are wet dust with soot or flowers of sulphur. In dry weather this dressing must be washed off when it has been on the leaves a day or two.

Red-rust is a common disease that turns Roseleaves yellow before their time. Then they shrivel and drop off, and when this goes on to ROSES 127

any great extent, it is both unsightly and weakening to the tree. None of the paraffin mixtures that used to be recommended for this and other pests are now considered good for roses. If you can have an Abol Spray you can get a mixture called 'Abol, White's Superior,' which is recommended by Miss Rose Kingsley in her book 'Roses and Rose-Growing.' It is easy to use, and efficacious against Green Fly and other pests. If you have neither spray nor syringe, dust a little flowers of sulphur on the leaves.

In summer an occasional dose of manure water is a great help to Roses, but it must never be given in dry weather unless a good soak of fresh water is given first; otherwise the thirsty plants would suck up the strong manure water too greedily, and make themselves ill. We tell you of this way to encourage your Roses in hot weather, in case you belong to a garden where you can get some manure water given. Otherwise you had better use a little Clay's Fertilizer or some other artificial manure.

Except in very cold districts, Roses should be pruned early in March. Tea Roses, however, should wait till the first week in April. The

object of pruning is to induce the plant to make new wood, but the amount to be done varies greatly with the size and age of the Rose. Climbing Roses need not be pruned at all, but in the autumn any dead wood you see should be cut out. On strong-growing bush Roses you may leave six eyes on a stem; on weaker growths three or four eyes. If you look at a Rose-tree you will see what we mean by 'eyes' are the little knots or buds on the stalks. With a sharp knife you should slice off the upper part of the stalk at a bud that faces outwards, because then the new shoot will grow outwards, and make a better-shaped tree. All brown, dead wood should be cut away. There will be a great deal more for you to learn about pruning when you are older, either from books or from gardeners. We have only told you one or two of the simplest rules, so that in case you have no gardener or gardening friend to help you, you should not let your bush Roses grow quite wild.

If your Roses have been given you, they may be on various stocks, and not on their own roots, so we think we must tell you how to know when it is the stock, and not the Rose, that is sending ROSES 129

up its tiresome wild shoots. Most Hybrid Perpetuals, Teas, and Hybrid Teas have five leaves, but most 'stocks' have seven or nine leaves. When you see these wild shoots coming up out of the ground, you must cut them away, as they are using food that should go to your Roses. But never cut the shoots that come out of the base of the Polyantha or the Rambler Roses. These look very like suckers, but are the flowering shoots of the following year.

You may just as well try to take a few cuttings from your own Roses, and, if they will let you, from other people's, as if you could succeed you would soon raise a stock 'on their own roots,' and have no trouble with briars. August is the proper month for this operation, and what you will want is some silver sand, a sheltered corner, and a sharp knife. A cutting should be nine inches long, this year's growth, hard and woody, but not succulent. It should either be cut straight across just below a joint, or torn away with a little tag or heel. Try both ways. All the leaves, as well as the tips, must be snipped off. Then make a little trench, fill with silver sand, and press your cuttings firmly in, letting

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them lie sideways rather than stand bolt upright. If you have a hand-light for them, so much the better, but they should strike without that provided you do not let the soil about them get dry or loose. The following year you will be able to transplant them, but while they are young it is advisable to pinch off their flowers.

CHAPTER VIII

CARNATIONS AND PINKS

You can grow carnations near London, as they do not mind some smoke and soot; but they are most particular about soil and situation. damp, heavy, wet soil is poison to them, and they do not like a hot, dry one. They want good plant food, and will do best in a rich loam. The natural way for Carnations to grow is on a steep slope, with their heads hanging down. In the Alps, where the single ones are found in a wild state, their roots are tucked away amongst the rocks, while a mass of flowers hangs over the edge. The real use of the little green cup from which the flower springs is to carry off water and keep the centre of the flower dry and wholesome. Our garden ones do well planted in pots and boxes, and hanging from window-sills and balconies. We do not often grow them so in

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England yet, but you may see splendid displays in the South of France, in Spain, or in South Germany. Carnations will stand more wind than most plants; in fact, the most valuable receipt for Carnation-growing is—'Give them all the air and sun possible.' It is useless to put them in shade, and if you have a wet clay soil you must dig in a quantity of sand for them, or, better still, mortar rubbish. Remember, too, that though Clay's Fertilizer and other patent manures are useful on dry soils, they do more harm than good on damp ones. Carnations do not like to come into direct contact with farm or stable manure. so if you use it you must have it buried at least eighteen inches. When Carnations are growing in your border they will need staking, and you can, if you choose, use the spiral stakes that need no tying. Another good way is to drive two stakes into the ground, about fifteen inches apart, one on either side of the plant, and a little in front of it; then tie a piece of thick string across them near the top and let the flower sprays rest on it. This will keep them off the ground, and is not as stiff-looking as a bunch tied to a single stick.

There are three ways of increasing your stock of Carnations: by layers, by pipings or cuttings, and by seed. We will tell you first how to layer them. If possible, it should be done in July, so that your layers are well rooted and ready to transplant in September. You must prepare some finely sifted compost of loam, leaf-mould, and silver sand. A town child may not be able to get leaf-mould, but you can, at any rate, buy a little silver sand, sift some of the best soil in the garden, and mix the two together. This must be placed round the Carnation you wish to layer, and you must choose those plants which have made good non-flowering shoots, neither too woody nor too tender and sappy. The leaves of each shoot must be stripped off at the end proceeding from the main stalk, leaving about three or four leafy joints above. Then with a sharp knife you make an upward slit, beginning just below a joint, and ending halfway through, so as to form a tongue. The shoot must then be carefully pegged down with a hairpin or a zinc layer pin in such a way that the cut is left open and the tongue is firmly fixed in the soil. A little more soil should then be put over the part

that is pegged down, and water given with a fine rose. In a month or so the layers ought to be rooted, and by the first or second week in September they should be ready to detach from the parent plant and plant out. It is a delicate piece of work to make the layer cut, as if you do not go far enough no roots result, while if you go too far the layer dies. Nor is it easy to peg down your layer successfully. But it is such an interesting operation that we think you will probably want to try it.

Cuttings should also be taken in July or August, because the ground is warm then. One way is to cut the stem square across a joint, remove all the leaves for at least two inches from the bottom, and plant in a situation that is shady but not directly under trees. The cuttings should be inserted at least two inches deep, and in soil that has had sand well worked into it. They must not be allowed to get quite dry.

Another kind of cutting we will describe from that delightful old gardening book published by John Murray in 1840, and called, 'Gardening for Ladies,' by Mrs. Loudon. 'Pipings are cuttings of Pinks and Carnations, and, indeed, are applicable to all plants having jointed tubular stems. They are prepared by taking a shoot that has nearly done growing, and holding the root end of it in one hand, below a pair of leaves, and with the other pulling the top part above the pair of leaves, so as to separate it from the root part of the stem at the socket formed by the axils of the leaves, leaving the part pulled off with a tubular or pipe-like termination—hence the name of pipings; and when thus separated they are inserted in finely sifted earth or sand, and a hand-glass is firmly fixed over them.'

Most gardeners snip off the tips of the outer leaves of pipings and cuttings, because then they can see more easily when new leaves are forming.

CARNATIONS FROM SEED.

The most attractive way of increasing your stock of Carnations is to grow them from seed. In this way you get a great variety, and take a sporting chance of raising a new specimen. But you *must* buy your seed from a first-rate firm. As it is rather expensive, you will wish to give it every chance, so you must prepare the soil carefully for your seed-pan or shallow box.

Whichever of these you use must have a few holes in it, then some broken crocks for drainage, and then the compost made of leaf-mould, loam, and silver sand. This mixture should be moist when you use it, as then you will not have to water much. The seed of Carnations is big enough for you to plant one by one with the point of a knife if you have a little patience. When this is done, take a little fine soil between your hands and sift it evenly and lightly over your seeds. Then cover with a glass, and, if you can, place in a frame or greenhouse. If you have neither, you must make shift with a sunny window as long as there is danger of frost; but we must warn you that it is not easy to raise seeds in a room. Even in an unused one they are likely to be too damp, or too dry, or to grow spindly in their effort to reach the light. March, April, and May are all months when gardeners sow Carnation seed, and by the end of May you might set your pan out of doors if you can keep slugs from it. In ten days or a fortnight the seedlings should appear, and then you must face the fact that the biggest and strongest-those about which you feel most triumphant—will be the single ones, while the poor little weaklings will give you the best double flowers. should be pricked off when they have four real leaves, either into boxes or pans or into the open ground. If you have raised your seed under glass in March, you must keep your pricked-out seedlings in a frame or greenhouse till all danger of frost is over. When you have neither, you must do the best you can with a room. important thing is to keep away frost at this early stage. Be careful, when your Carnations are in the open ground, to keep away slugs with soot or lime, and look out for Leather-jackets and Wire-worms, both fatal to Carnations. The Leather-jacket is the larva of the Daddylong-legs, and in this state has no legs at all. In spite of this, they can get along as fast as they wish. They are slaty-brown in colour, and look like short, fat, lifeless grubs. Wireworms have yellow bodies, brown heads, and three pairs of legs behind their head. Both these pests may be trapped by burying small pieces of raw potato, carrot, or turnip, beneath the soil, with skewers through to mark where they are. These traps should be examined

every morning. Another way to catch Leatherjackets, or Chop-worms, is to put pieces of slate, wood, brick, or turf on the ground, as they creep under such things for shelter. Rust, Spot, Eel-worm, and the Carnation Maggot are also enemies that do much damage. The two first are fungi, and the best way to avoid them is to give your plants sun and air. The Eel-worm produces a disease called gout, and no remedy is known for it. The Carnation Maggot can be dug out of the heart of a plant with a needle. We hope we shall not have discouraged you by telling you a few of the forty-nine ills the Carnation is heir too. They are not really difficult plants to keep alive if you can give them plenty of air and the right soil. You must either increase your own stock every year or buy new ones. The same plant will go on for several years in favourable conditions, but you cannot depend on many doing this.

Some of your Carnation seedlings are sure to be single, and they would look very pretty on a rockery or hanging from a wall or a window-sill. We have not said anything about the different classes in which florists divide Carnations and Picotees, because we do not think you need specialize in this way till you are grown up. Perhaps even then you will agree with us and admire many a seedling that the hidebound fancier would consign to the dustheap. The old Clove, that most attractive of Carnations, will do well on a sandy soil, but dies out in cold, wet seasons.

PINKS.

For an edging there is nothing to equal a good fringed white Pink. We have seen the little old-fashioned one doing well in the Pensioners' Gardens at Chelsea Hospital, and one of the authors has grown masses of Mrs. Sinkins six miles from Charing Cross. They want an open border and ordinary well-dug garden soil. In times of drought, and on very hot, dry soils, they want water from April on until they flower; but in most districts they look after themselves in this respect. When the clumps are more than a year old, we have seen a good gardener give each one a liberal dressing of fresh soil in early spring, so that it should not feel starved. This was done without disturbing the roots by coaxing

the soil under and amongst the shoots. Pinks can be divided quite early in the spring, or after flowering, or they can be increased, like Carnations, by layers, pipings, or cuttings. When you divide plants always choose showery weather, and dig the hole for each portion of your plant so deep that the roots are not bruised and crammed. When gardeners divide Pinks, they replant them deep, and with the leaves rather bunched together. The habit of the Pink is to spread itself on the surface of the soil, with its stalks uncomfortably exposed, and in the course of the summer you will see each clump coming back to its untidy ways.

We agree with Mrs. Ewing, who said that some gardeners had witchcraft in their hands, and could make anything grow and flourish. We have seen one of this kind transplant a Crimson Rambler on a hot July day, and the Rose liked it. We used to see the same one divide her Pinks, and make every bit take root and increase. But as you may not be a born witch or wizard, and as you may find layers, pipings, and cuttings all difficult operations, we will tell you the easiest way in the world to increase your

Pinks. We came across it in Gardening Illustrated, in one of those little narratives of real personal experience that make a good gardening paper so useful and interesting. The writer said that all he did was to tear off strong young shoots with a good heel or tag attached, trim off the lower leaves, and plant firmly in a partially shaded situation and in sandy soil. We have tried this plan ourselves, and have found that every slip we took grew. We take them when our Pinks have quite done flowering. The following year we plant them out, and they flower a little, and by the second year they are good strong clumps. But you will probably not find this way answer if you have a cold, heavy soil.

CHAPTER IX

LILIES

WE will begin with Lilium Candidum, the Madonna or Cottage Lily. You know it, of course: the big white lily that the Madonna, and sometimes the angels, carry in old pictures, and that you see at its best in cottage gardens. All gardeners ask each other 'Why do we see great healthy clumps of this lovely Lily in poor little neglected cottage gardens, while in our highly-fed and carefully-tended ones it gets the now well-known Lily disease?' We hope your Madonna Lilies will not get it, because it is rather heart-breaking to watch its ravages. In the spring you see fine, healthy leaves, and you look forward to the tall stems that will arise from them and bear great scented, shining white flowers. But one day you notice that the leaves look rather brown. A stem has shot up, but the leaves on it look brown, too.

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Every day it seems to get browner and flabbier, and at last you cut it down because it is so unsightly. Sometimes these sick stems bear sick, half-decayed Lilies, but they give you no pleasure. A healthy Dandelion is far more beautiful.

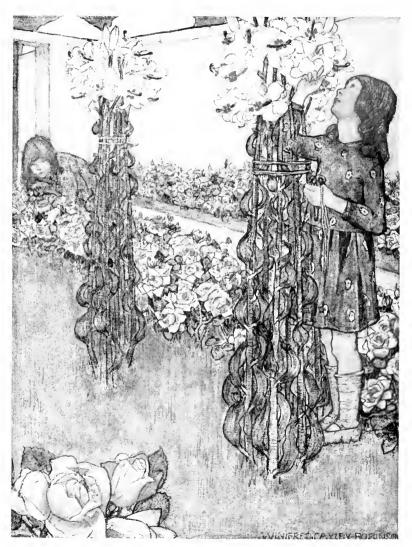
One of the best amateur gardeners we ever knew used to say that there were some plants that throve on neglect, and we really believe that the Madonna Lily is one of them. The cottager who puts some healthy bulbs in dry soil, and leaves them there year after year, gets better flowers than the gardener who fusses and feeds them. There seems to be no doubt that the Lily disease has its best chance in a low, badly drained soil that holds moisture. If you can give your Lilies a dry, well-drained position, you will probably succeed with them. Buy your bulbs from a good firm, dust them well with flower of sulphur, plant them about five inches deep and nine inches apart in sand, and then never interfere with them again. Remember that their flowers will last longer if not exposed to the full midday sun, but do not plant them near the roots of the trees, or where rain cannot reach them. They

require rain, but not stagnant moisture. Three bulbs together make a nice clump, and they would look well in the centre of your border. The leaves die down in winter, and when the new ones come in spring, you must look out for slugs. If you have many, surround your Lilies with lime, soot, or wood ashes. Mr. J. Weathers says that a frequent fine syringeing with warm soapy water will sometimes check the disease. If when your Lilies flower you do not want their petals dusted over with yellow pollen, you must remove the anthers, the part of the stamen that contains the pollen.

ORANGE LILY (LILIUM CROCEUM).

This is the splendid orange Lily with purple spots so much grown in Irish cottage gardens. It is one of the easiest and hardiest of Lilies, and looks well against a background of shrubs or ferns. The bulbs should be planted from six to nine inches deep, and need not be disturbed for years. If you have to dig yours up in spring or autumn, you can increase your stock by carefully detaching the little offsets from the parent bulbs. In time they will make flowering plants. This Lily





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will grow in sunshine or shade, and in any healthy garden soil.

MARTAGON, OR TURK'S CAP, LILIES.

Some Lilies make two kinds of roots—one kind from their base, and one kind from their stem. Others only make basal roots, and should, on that account, be planted in autumn. Their root action begins in October, and goes on through the winter, so that if they are lifted in spring they are seriously damaged, and may not flower. All the Martagon, or Turk's Cap, Lilies, belong to this If you want them you must plant them You can have them in crimson, in autumn. white, or yellow, but the handsomest is Album, with stems from four to five feet high, carrying a large number of waxy white flowers. The petals in this species are turned back, and give the effect of a Turk's cap or turban. They are easily grown in a mixture of loam and leaf-mould, and in a partly shaded position.

LILIUM SPECIOSUM.

There are several varieties of this Lily, and they are all most beautiful. They flower in the late summer and autumn, and should have a warm and sheltered situation. They should be planted in loam, peat, leaf-mould, and sharp sand. If you live in a cold district, you should give these Lilies and the Auratums a covering in winter. A mulching of manure is good for them, and will keep them warm.

TIGER LILY (LILIUM TIGRINUM).

The best variety of this Lily is Lilium Tigrinum Splendens. The flowers are orange-red, spotted or 'tigered' with blackish purple. A fine specimen sometimes reaches a height of seven feet, and bears twenty-five flowers. All the Tiger Lilies are easily grown in a well-drained soil in a partly shaded situation. They can be increased by offsets, or by the little blackish bulblets you will see on the stems amongst the leaves. These will drop and root themselves if not gathered, but they will not make flowering bulbs for some years.

LILIUM AURATUM.

This is the King of Lilies, the 'Golden Lily of Japan,' and a native of that country. If you live within reach of Kew Gardens, you should go

there in summer on purpose to see these splendid Lilies flowering amongst the Rhododendrons, where they have a moist, peaty soil for their roots. Mr. Wallace, of Colchester, the great authority on Lilies, says that the Auratum likes a strong soil, not too heavy, a good friable loam. It should be planted about three times its own depth, and, if you can possibly get it, in some moist sea-sand. It is one of the stem-rooting Lilies, and will sometimes get support through its flowering season from these roots only. But if it is to make good bulb growth, too, so as to come up and flower another year, it must have basal roots, and be planted directly it arrives from It requires a warm and sheltered situation, and in spring likes a mulching of well-rotted manure. Do not put it where it can be shaken by violent winds or scorched by a full midday sun. The best variety is Auratum Platyphyllum. There is one thing you must remember about all Lilies, and that is that they sometimes lie dormant for a year. We have often found they did this after removal. We once planned a fine display of the Madonna Lily in a corner of a new border, but though we bought dozens of bulbs and put them in, none came up. We thought they must have resented the move and died; but when we grubbed down amongst them to see what had happened, we found every bulb as plump and healthy as we could wish. They were having a year's sleep.

DAY LILY (HEMEROCALLIS).

This belongs to the Lily Order, but it is not a bulb. It is a herbaceous plant, with a rhizome and short, fleshy roots, rather like a bunch of brownish-white fingers. They succeed in any good garden soil, but they like one that has been well manured some weeks before planting. They should be left undisturbed three or four years, and may then be divided in autumn when the leaves have withered. When you replant, put them from twelve to eighteen inches apart. The flowers are yellow or tawny, and only last for a day, or at most two. But they succeed each other quickly for several weeks. The Greek name means 'Beauty of a day.'

LILY OF THE VALLEY (CONVALLARIA MAJALIS).

There is a popular idea that the Lily of the

There is a popular idea that the Lily of the Valley will grow in any kind of deep shade, and

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so you see its poor, starved leaves struggling for life under evergreen shrubs, or the strong roots of trees that steal all its nourishment. The Lilv of the Valley does like shade for the greater part of the day, but it is a plant that requires proper food. It will stand sun if you give it a deep, rich soil. The best situation for it is under a wall with a north or west aspect, or in any shady place that has good soil with some sand in it, and fresh air overhead. The bed should be made in October, and the little tuberous roots set two inches apart each way, with the point of the crown just under the soil. Work the soil well amongst and over the branching roots as you plant. In a cold climate protect the bed with bracken or dead leaves in winter, or, better still, with a covering of manure. After four years your Lilies of the Valley should have grown into a thick mat of leaves. Then in October you must dig them up, dress your bed with fresh manure, soil and sand, pull your plants apart, and set them in rows again. If you can make two beds, one in sun and one in shade, you will have a longer succession of bloom. When you gather the flowers, do not pick many leaves, and, at any

rate, only one from each plant, as they nourish the crowns.

There is a pretty story of the way the Lily of the Valley came to run wild, as it does in German woods. Once upon a time, so long ago that no one in Germany had any Lilies of the Valley, there lived an Abbot who was a great gardener and a holy man. A pilgrim passing through his district was kindly received by him, and in gratitude gave him a withered-looking root that he said he had brought from a country where similar roots bore lovely scented flowers. The Abbot planted it and watched it, as he watched everything in his garden. In the spring the root sent up a few broad, shining leaves, but no flowers. He left it alone, and next year there were more leaves and two or three Lilies of the Valley, the first that had ever grown in Germany. By the third year the fame of the plant had travelled here and there, so that people who loved their gardens came to the Abbey on purpose to see it. Every year there was a bigger bed of the Lilies and a longer procession of visitors to see them, and the heart of the Abbot was filled with pride and vainglory, because he, and

no other man, possessed the flowers. But he was a holy Abbot; he became afraid of the pride growing within him, and saw it to be evil. So one day he dug up every Lily of the Valley growing in his garden and carried them into the woods, and planted them here and there, that they might belong to all men, and not to him alone; and ever since the woods of Germany have been full of Lilies of the Valley.

CHAPTER X

ROCK AND WALL GARDENS

The very worst advice we ever saw given about gardening was given in a popular magazine in an article on Rock Gardens. It said that all you wanted for a rockery in a town or suburban garden was a cartload of stones or bricks dumped down in a corner. We really wondered when we read it whether the writer thought that plants could feed on bricks. Soon after reading this nightmare of an article we came across Mrs. Swanwick's clever book, 'The Small Town Garden,' and we will tell you what she says about the proper way to start a rockery. 'If people who make a rockery would consider that it is to be made of earth, supported with stones or rocks, they would be much nearer the right method than those who think of a rockery as a pile of stones with a little soil dribbled in among

them. If we bear these requirements in mind, it becomes clear that the stones or rocks must be set so as to leave no hollows empty of soil between them, nor niches kept dry by overhanging rocks, and the slope of the earth must be such that the rain will not wash it away, and expose the roots of the plants.'

It may be that a flat, sunny border cannot be spared for you, but that if you choose you may annex a grass-grown bank or slope of a hill going up to a stone wall or to shrubs. We will tell you how we once saw a place of this kind made into a charming rock garden with some blocks of limestone and a few days' labour. The bank in this case led from an upper lawn to a lower one, and had a south aspect. The turf was all removed, the soil was thoroughly broken and mixed with sand, and then slabs of limestone were mixed into it, each one with a slight upward tilt, so as to hold the earth and catch the rain. The great point to remember about rock gardening is that every stone or rock should be wedged into the soil a little slantwise, so that the hidden end slants down and the end you see slants up. You soon find out an elementary truth of this kind

for yourself if you try to grow things in a badlymade wall or rockery. We once watched someone struggle with a loosely built granite wall that tilted a little towards him, and which had no soil in its crevices. He tried stuffing in earth, but as the slant was wrong it fell out as it dried. No rain reached the roots of his plants because the top stones sheltered the lower ones, so nothing that needed moisture would live. Perhaps in the course of years he might have coaxed some of the house-leeks to find a lodging there; but as he wanted a wall garden clothed in spring with hanging sheets of flowering plants, the only way was to pull the wall down and build it properly. Then it had earth packed into every crevice, and the stones so arranged that the rain could reach every plant set amongst them. Some plants, it is true, will live on next to nothing, but there are very few that will do without rain and will survive when their roots have reached a hollow place amongst stones.

We think that while you are a child you will probably not have much chance either of making rock gardens or of building walls; but you may have a bit of wall or garden that easily lends itself to rock plants, and would not do well for anything else. In some parts of England you may have a garden that is rock with a sprinkling of soil on it, and the difficulty will be to find or make places for vegetables and deep-rooted shrubs and flowers. In a garden of this kind the children are quite likely to have a patch where the rocks are showing through the soil, and where it is difficult to find pockets of earth deep enough even for Daffodils or Tulips. But there are many beautiful shallow-rooted plants you can grow in such places as these, for they will not be like the silly heap of loose stones or bricks described in the magazine article. For instance, if you put a bit of the Arenaria Balearica in such a rocky corner as this, it will find its way here and there, clothing every stone with a mossy carpet, and in spring putting out thousands of tiny white starry flowers. Then there is a charming Dwarf Veronica (Veronica repens), that seems content with very little soil, increases at a great rate, and has that pretty way of clothing the stones and taking their shapes. Another of our favourite common Alpines is the Campanula Cæspitosa, a small Campanula that sends up its quivering white or blue bells the whole summer through. It is so hardy and rambling, and increases so fast, that the fastidious rock gardener warns you not to let anything precious grow near it.

You will have to find out for yourself which rock plants are so greedy and pushing that you get tired of their company; for this must depend on your soil and climate. In Cornwall the little Arenaria Balearica spreads so quickly that you soon tear it up by the yard, while in the North of England it seems to increase slowly. In a cold district you may be glad of things that would overrun you in a warm one. Near a town people grow whatever will best endure the soot and close air. When you are older you will have to find out which plants want lime and which granite, which peat and which sand; but we will only tell you of plants now that will grow in any ordinary good garden soil mixed with a little leafmould and some small stones, and we will only give you the names of plants that can be got at any good nursery garden. If you can do so, get your plants in little pots, and put them into your rockery or your wall on a showery spring day.

But take care that every plant has a good deep pocket of fresh soil to feed it.

PLANTS FOR A ROCK GARDEN.

Alyssum Saxatile.—This grows into a dwarf shrub in time, and is a mass of small, brilliant, yellow flowers in spring. It is very sweet, and the bees love it. It looks well near Aubrietias, or near Lithospermum Prostratum. Suitable either for a rock garden or for a loose stone wall in which you can have a deep pocket of earth for its roots.

Antirrhinums (Snapdragons).—We think the good dwarf ones are charming on rockeries. We once had some pink ones grown from Sutton's seed that were as pretty as little Rose-bushes. On walls some of the taller ones often look well, and when they are self-sown they seem to flourish in chinks where there cannot be much food for them. If you have a wall you should sow a little seed, and be careful not to mistake the seedlings for weeds.

Anthericum Liliastrum (St. Bruno's Lily).—A charming plant, growing from one to two feet high, and flowering in May or June. It likes a

sandy loam. If you want to increase it, you can divide it in the autumn.

Arabis.—If you are a London child, you will have seen this with London Pride in every London rock garden. It is the commonest of rock plants, and its white flowers make a pleasant show near Aubrietias and Alyssum in spring.

Arenaria Balearica.—This is the little creeping mossy plant we have told you of already. Put a bit on some soil near any stones you want covered.

Aubrictias.—You must know these if you have ever looked at a garden in spring. They are in various shades of mauve and purple, and make great sheets of colour on walls and rockeries. It is sometimes called Purple Rock-Cress. You can divide them in autumn, or you can grow them from seed sown in May or June.

Campanulas. — There are many varieties of blue and white Harebells that do well on walls and rockeries. Pumila, Pulla, and Cæspitosa are three well-known dwarf ones. Isophylla is a good hanging one, but not quite hardy. Persicifolia is an easily-grown tall one. They are increased by division.

Helianthemums, or Sun Roses.—These must

not be confused with the Cistus, or Rock Roses, which are charming, but not so hardy as the Helianthemums. If you grow them from seed sown in May or June, you should in the following year have a number of dwarf shrubs bearing single flowers in a variety of shades, ranging from white and yellow to bright crimson.

Iberis Sempervirens is often called Perennial Candytuft. We have known people buy it by its Latin name, and be much disappointed to find it was the well-known white flower they had seen in all their friends' gardens. It is not proud, and will grow almost anywhere.

Iris Pumila and Iris Stylosa.—We mention two out of the many beautiful Irises suitable for a rockery. Try to get the variety of Pumila called Cœrulea, a lovely sky-blue. Stylosa is the scented Iris that flowers in winter. It likes sun and shelter, and dry, hard ground. It must be manured.

Lithospermum Prostratum.—If we were only allowed one rock plant out of all there are, we would choose this one. It flowers nearly all the year round in some parts of England, and its blue is as vivid as the blue of a Gentian. If you

can plant it so that its roots can tuck themselves under a big rock as they grow, so much the better. We have transplanted a big plant of it successfully, but we did it in fear and trembling, as it is said to hate disturbance. You had better not try to divide it. It can only be increased by cuttings, and they are not at all easy to strike.

Phlox Setacea.—This is one of several varieties of dwarf Phloxes that are useful for edgings and rockeries. They must have sun and well-drained soil, or they damp off.

Speedwell: Veronica Repens.—There are many varieties and sizes of Veronica. Some make big garden shrubs. The one we recommend here is a tiny trailing plant, with small pale blue flowers. It increases at a great rate, and is easily divided. Slugs like it, but do not make headway against it in many gardens. It makes a pretty dwarf edging amongst stones, as it creeps amongst them, and partly covers them.

The Sedums, Saxifrages, and House-leeks, or Sempervivums, are all suitable for rockeries. Some kinds of Sedums, or Stonecrops, grow wild in our hedges. You should get Sedum Spectabile, the Japanese Stonecrop, which bears large



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heads of pink flowers in August. There are many widely differing varieties of Saxifrage, or Rockfoil; for instance, Muscoides, the Mossy Saxifrage, makes a plump, low cushion of green moss on your rockery; Sarmentosa is the wellknown weed, Mother of Thousands; Umbrosa is London Pride. Some have large leaves and pink flowers; some send up pyramids of white flowers from tufts of silvery leaves. You must grow one or two at a time, and get to know them by degrees. Sempervivums are those little green rosettes you see spreading in clumps on old roofs and walls. One of the most fascinating is Sempervivum Arachnoideum, the Cobweb House-leek. It covers itself with a curious white down that looks like a spider's web. They like a dry sandy part of the rock garden, and full exposure to the sun.

Besides these plants, you should put a few bulbs in your rockery. Some of the very small Daffodils, Narcissus Minimus or Bulbocodium look charming coming up through a mossy carpet of Arenaria Balearica, for instance. You could also have some Snowdrops, some Siberian Squills, some autumn Crocuses, some Fritillaries, and some Dog's Tooth Violets (Erythronium Dens We much prefer the English names for flowers, but it is often necessary to give both, so that you should recognize it in the catalogues. We heard of someone who sent to the other end of England for a plant advertised as Tussilago Fragrans, or the Winter Heliotrope, and she was much disappointed to receive a bit of the common Coltsfoot, that was an obnoxious weed in her own garden. Someone else sent for Hieracium Aurantiacum, which certainly sounds a firstclass name; but she did not want a bit of the orange Hawkweed, as it had established itself more firmly than she wished in her rock garden already, and had to be kept in bounds with a spade.

We have not given you separate lists for a sunny and a shady rock garden, because we shall tell you a little in another chapter about plants that like shade. You must have some Primroses, Polyanthuses, and Auriculas on your rockery, and though they like the sun in spring, the more delicate kinds need some shelter from the hot summer sun. Try to get Primula rosea, the hardy rose-coloured Himalayan Primrose,

and Primula Cashmeriana, a Primrose that sends up heads of mauve flowers on a fat stalk. Both need much moisture. Then, the Japanese Primroses are very handsome, and seed themselves when once established; and Sieboldi, with its many varieties, is easily increased, either by seed sown in spring or by division of the roots.

Now we have chosen just a few flowers for your rock garden, and with every word we write others come and look at us reproachfully, saying, 'Why are we left out?' We see neat little tufts of Thrift, or Sea-pink, and hanging sheets of whiteflowered Cerastium, Anemones of sorts, Alpine Violas, Forget-me-nots, Hepaticas, Gentians, the finer Columbines, and shrubs of various kinds and sizes. But we have only had one aim in writing this chapter, and that was to lead you just one step towards the rock garden you must make for yourself when you are older. Then you must get yourself 'Wall and Water Gardens,' by Gertrude Jekyll, and 'My Rock Garden,' by Reginald Farrar, two books that will teach you all that books can about this most fascinating side of garden craft. But from the first one we should like to quote a short passage

that tells you how a wise gardener supplements what he learns from books by his own qualities of patience and observation.

'Nothing is a better lesson in the knowledge of plants,' says Miss Jekyll, 'than to sit down in front of them, and handle them, and look them over just as carefully as possible; and in no way can such study be more pleasantly or conveniently carried on than by taking a light seat to the rock wall and giving plenty of time to each kind of little plant, examining it closely, and asking oneself and it, Why this? and Why that? especially if the first glance show two tufts, one with a better appearance than the other; not to stir from the place until one has found out why and how it is done, and all about it. Of course a friend who has already gone through it all can help on the lesson more quickly, but I doubt whether it is not best to do it all for oneself."

That is excellent gardening advice, and you can apply it to whatever you are trying to do, whether it is a rock wall or a patch of Mustard and Cress.

We must end this chapter with a short list of things we hope you will never allow in your rock garden, and as they are all to be seen here

and there, you need not say that the advice is unnecessary. Coloured glass balls, for instance! We assure you that, especially in Germany, there are many people who think coloured glass balls beautiful objects in a garden. Others like bits of quartz, and in cottage gardens you may see sea-shells and broken glass. Then, persons who ought to know better will make a grimy erection with clinkers or broken bricks, and a home for Slugs and Woodlice with a rotting tree-stump. You must do none of these things. If you live where you can easily get stone, have a rock garden in some form, even if it is only an edging of stones to your herbaceous border, and grow some of the plants we have told you of amongst them. If you live where your walls are of brick, you may still get some plants established on them. For instance, where weeds have established themselves, you can remove them, stuff in a little good soil, and sow a few seeds of Snapdragon or Old brick walls make beautiful Wallflower. wall-gardens, and when the builder is not looking you can help on the process in a new one with a chisel, a little fine moist soil, and a few roots or seeds.

CHAPTER XI

DIFFICULT AND SHADY GARDENS

As we told you in our first chapter, the worst piece of ground you can have for a garden is one already occupied by the roots of trees and coarsegrowing shrubs or hedges. All around London Privet hedges and grimy Laurels are to be seen everywhere, and wherever people try to grow flowers near their thievish roots the flowers languish. You may put a few Crocuses in front of a group of Laurels, but you will not get much else to flourish. Even that hardiest of Saxifrages, London Pride, leads a starved life, and you cannot know how beautiful it is until you have seen it sending up masses of its foamy pink flowers in good air and from good soil. If you not only have an impoverished and shady garden, but one under the drip of trees, you will not be able to do much with it. Still, we can tell you about a few things we persuaded to live in a situation of this kind not far from London. You must understand that the two authors of this book have had very different gardening experiences. One is the mistress of a large and very beautiful garden running down to the sea in the West of England, while the other has been a wanderer on the face of the earth, and has worked in many gardens of varying sizes. It is usually her fate to find a wilderness, delve like Adam in it till it is a garden, and then go her ways to the next wilderness. The one you are to hear of now was not a pleasant country wilderness, where even the Briars and Nettles are growing in good clean soil and in fresh air. It was one of those disheartening builders' gardens, where the earth looks a sort of unwholesome lumpy drab, and is full of old bricks and gingerbeer bottles. One side of it was bounded by a Privet hedge, and the soil was starved, but as it was sunny, we got the strong herbaceous things and pinks to do well in it. The other side, which was under great Horse-Chestnuts and Laburnums, got no sun at all, looked very bare, and was evidently wretched soil. We had

it well dug and dressed, and planted clumps of Michaelmas Daisy, of Iris Germanica, and of the common Evening Primrose a little way back. The Michaelmas Daisies soon made big bushes, and did very well. The Evening Primroses flowered, but ran up rather tall and spindly. The Iris did not flower well, but it increased, and made a clump of handsome leaves. In front we found that the Perennial Candytuft (Iberis Sempervirens) did well, and increased quickly. You can hardly have a more satisfactory plant for the front of a border of this kind. Crocuses came up year after year, too, but we never persuaded our Daffodils to flower more than once in this garden. Annuals we advise you strongly not to try. They are a source of disappointment in such circumstances. The pretty little yellow-flowered shrub St. John's Wort should do well under trees, and so will some hardy Ferns.

If your garden is in the country, and is only partly shaded by trees, you can grow many beautiful things in it. Perhaps you will be able to have a background of large stones, and plant Ferns amongst them. The hardiest Ferns are

Male Fern, Osmunda, Hart's Tongue, Spleen Wort, Lady Fern, and Shield Fern, and these all like shade. Amongst the Ferns you should have Solomon's Seal, Columbines, and Foxgloves. As far as you can, in a garden of this kind plant big patches of one flower, and not a muddle of single specimens. Have a bed of Lilies of the Valley in some part of it, and under the trees a bed of Wild Hyacinths. Snowdrops do well amongst the roots of shrubs and trees, so well that in some gardens they spread and increase like a wild flower. They are fond of peat. Primroses do well in shady places, and so does the Wood Anemone (Anemone Nemorosa). Periwinkle will flower in shade, though it likes sun part of the day. Many Saxifrages and Sempervivums (Rockfoils and Stonecrops) will do well in shady places. For instance, if you have a stone edging to your border, you will be able to have clumps of the mossy Saxifrages and of various Stonecrops. Between them the little dwarf Campanulas would do well, and give you colour all through the summer months. The splendid tall Campanula Pyramidalis might do farther back near your Ferns, if you can give it

good soil; so would Campanula Persicifolia, which grows wild in Yorkshire woods. Many Lilies like partial shade and to be near shrubs, but they should never be planted close to the roots of trees.

It is not as generally known as it should be that nearly all the Cyclamens are hardy. The Persian Cyclamen, that we know so well as a pot plant and in greenhouses, is not hardy, and you must not try that in your garden. Get some of the other species which you will find offered in any good bulb catalogue, and in winter give them a covering of moss or dry leaves. They like a dry, porous soil, mixed with a little peat or leaf-mould and some lime or old mortar. The corms are often half out of the ground, or at any rate level with it; but some gardeners, who have paid great attention to their culture, prefer to bury them just under the soil, because the roots of some species come from the top of the corm. The one thing Cyclamens will not stand is stagnant moisture. You must give them well-drained, sandy soil, mixed with a little lime. We repeat this because it is so important, and because Cyclamens are so beautiful that they

are worth any trouble you can take for them. Some flower in spring and some in autumn, and they must be planted when they are at rest: the spring ones in October or November, and the autumn ones in June. If they flourish with you their seedlings will appear naturally; otherwise you had better buy new corms when you want them. Gardeners raise them from seed, but this requires a frame or gentle heat.

In a mild climate you can grow Hydrangeas and the shrubby Veronicas in shady places, but they will not live through prolonged hard frosts.

CHAPTER XII

SOME HARDY CLIMBERS

We think the American who described climbing plants as 'creepers and crawlers' must have been first cousin to the American novelist who said the house in which his heroine lived was not disfigured by any messy plants growing near it. As you may have a wall, a paling, an arch, or the dead stump of a tree that you would like to disfigure with flowers all the summer, we will tell you of a few good hardy climbers, other than those already recommended in earlier chapters.

A creeper should always be allowed to grow as naturally as possible, and not be restrained more than is necessary by nails or by cutting back. Climbing Roses lose much of their vigour and beauty if penned severely and stretched out tight on a wall. Most climbing plants need some support at the beginning, but later in life take

care of themselves. One climber may be freely allowed to mingle with others, so that you can think out levely combinations; but you must understand which are free growers and which are shy and delicate, or the strong will strangle the weak. The common Honeysuckle and a pink monthly Rose climb all over the front of a cottage known to us, and on the south side the exquisite Solanum Jasminoides throws its clusters of snowy flowers into them. The Honeysuckle and the monthly Rose would grow almost anywhere in these islands, but the Solanum Jasminoides, or Winter Nightshade, is only hardy in the South of England and other warm dis-It finds support for itself by a twist of its leaf-stalk (you will have watched your Giant Nasturtiums do this most cleverly), and its colour varies a little according to its place in sun or partial shade. The shoots of this creeper must be cut back in spring, when frosts are well over, and in hot weather it must be watered.

The Wistaria is one of the most beautiful of all creepers, and its long mauve racemes mix well with a Dorothy Perkins Rose. The Wistaria is a native of China, and was brought to Europe by Mr. Wistar in 1816. The original plant is still to be seen at Wistar House, grown to an immense size. It is a most useful creeper, for it will flower year after year without any attention to roots or soil. If you have one you should, if possible, get a gardener to pay its woody branches a little attention once a year, as, if left quite to themselves, they grow into an inextricable tangle, too thick in some places, and not thick enough in others.

We are sure you gardening children who live in a cold climate must often wish for a warm one. But now we will tell you about one of the most brilliant creepers known that likes to be as far north as possible, spreads like a weed in Scotland, Yorkshire, Westmorland, and is usually a 'miffy doer' in the West Country. This is the Flame Flower, the Tropæolum Speciosum, whose vermilion trumpets can be seen two miles away on a clear day. It is a capricious plant, sometimes failing when it has every attention, and succeeding when it is badly treated. Mr J. Weathers tells a story of a garden in which it was planted most carefully in many places, but some tubers left over were thrust anyhow

amongst the roots of an old yew. None of the correctly-planted ones came up, and the others were forgotten. In the third year someone noticed a flame-coloured flower on a Yew, and found that the badly-planted tubers were all coming up, increasing, flowering, and likely to go on for ever. It dislikes scorching heat, and needs moisture in the air. A west or north aspect suits it, and bushes or hedges amongst which it can scramble. We know a Westmorland garden where it can hardly be kept within bounds, and there they believe in deep planting. A daughter of the house got it to succeed against the wall of a cottage on the place, where it had never succeeded before. 'What did you do?' we asked. 'I dug till I got to New Zealand,' she said, 'and then I planted it.'

If you live in the Midlands or the South, where this Chilian Tropæolum would probably not do well, you had better be content with the Ampelopsis Veitchii, the best of the Virginian creepers. It is a wonderful sight in Oxford all through September, and even in London it makes a lovely blaze of colour on many a dull house and wall. It is the least troublesome of all creepers, as it

attaches itself by little suckers. We once grew the Ceanothus Veitchii with it, a shrub that is often trained against walls, and which in spring becomes a mass of powder-blue flowers. It is one of the easiest and handsomest doers we know, but be sure to get the right kind, the Gloire de Versailles or the Veitchii. There are a good many kinds of Ceanothus, and some are a very poor colour.

We have told you already about two of the Clematis tribe, the white Montana and the purple Jackmanni. The Montana must not be pruned until its flowering season is quite over. If you cut it back while it is making new shoots, you will injure it. The Jackmanni and its relations are hybrids, and you must try to get either a layered plant or one grown from seed, as the grafted ones are unsatisfactory. The flowers are produced on this year's shoots. The plants should be cut down in winter to twelve inches from the ground. If you get one of the 'Patens' section, remember when you prune that the flowers are borne on the old ripened wood. Only dead wood should be cut away. Lady Londesborough, Miss Bateman, and Mrs. George Jackman, are

three well-known ones. The Wild Clematis, Vitalba, or Traveller's Joy, will grow into a dense mass if left undisturbed. We know of a cottage where, with a Japanese Honeysuckle, it forms a rainproof porch; and even that is nothing to one at Belvoir Castle, which is twenty feet high and thirty feet in diameter.

The great advantage of Wichuriana Roses is that they are evergreen, and it is a good plan to grow one of them—for instance, the deep red Hiawatha, with the yellow Jasmine (Jasminum Nudiflorum), whose flowers come out before its leaves. If we could only have one creeper out of all there are, we would have this Jasmine, which flowers in winter, and is quite hardy. Be sure not to let anyone prune yours in autumn. Ignorant gardeners often do this, and cut off all the shoots that wanted to flower. Any pruning necessary should be done in March or April, but you need only cut out dead wood. The charming sprays, if cut in bud, come out well in water.

The Hop is a graceful, hardy, and quickgrowing climber, and there is a variegated kind that some people prefer. A Hop will cover a big arch in one year. Also, if you are not on the spot to attend to it, it will throttle every other plant near, and it will probably acquire several varieties of insect blight, and hand them on to its neighbours. One of the authors has suffered from sharing a garden with a Hop enthusiast, and she well remembers the struggle she had to rescue her Roses, Hollyhocks, and Delphiniums from the Hop's embraces and from the green fly it encouraged. It came up year after year, too, and would not be killed.

The Everlasting Peas are most useful climbers in town gardens. They have no scent, but they give you colour, and are extremely hardy. Then, there are many annual climbers, some of which we have told you about already. If you get Convolvulus Major do not be in a hurry to sow your seeds. The seedlings are delicate, and do not seem to recover well if touched by a spring frost. The first week in May is soon enough. We have seen their blue trumpets grown with a Gloire de Dijon, and their pink ones opening all over an old Lavender bush. Another combination we remember in the same garden was a yellow Banksia Rose and a pink monthly one climbing together up an old grey stone wall.

The climbing La France, too, loves a wall, and will flower in masses against one.

But we might go on for ever about the fascinations of creepers and crawlers. The real difficulty is invariably that of choice. You never have room for all you want to grow.

So you must decide for yourself what you will grow; but we advise you strongly to buy your climbers from a first-rate grower. They only cost 1s. or 1s. 6d. each; you cannot have room for many, and they last for years. The cheap stuff advertised is usually most disappointing. We once planted two of the Ampelopsis Veitchii against the same wall, one from the great Veitch himself, and one from a little man round the corner. The difference was in colour rather than in growth. Both lived, climbed, and covered the house, but it was the Veitch plant that turned glowing red and yellow. The other remained brownish-green. It was the same with a Ceanothus. The one from a good firm covered a side of the house with soft yet vivid blue in spring. A cheap one flowered, but its flowers were wishy-washy, a vexation rather than a pleasure.

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Before you plant a creeper turn over the soil well, and if it is poor have some good manure forked in. We should never dream of planting a climbing Rose without digging a large hole and putting in a quantity of manure for its roots to feed on, not immediately, but later on. There should be soil on the top of the manure, and in that your Rose should be planted, as we have told you, firmly, yet not too deeply, and with outspread roots. The main stem of your creeper should be as near its support as possible, and tied to nails, wires, or trellis, with bast or twine; but be careful not to bind it tightly, or when it grows it will be cut through. Many gardeners use little strips of cloth and nails, but the cloth shelters insects.

CHAPTER XIII

FRUIT AND VEGETABLES

To this hour one of the authors of this book prefers unripe Greengages to ripe ones, because they remind her of those that grew against the wall of her own garden when she was a child, and which she always ate long before they were ripe. In her days children did imprudent things of this kind, but no doubt you modern children know too much about the laws of hygiene to run such risks-at least, we hope so, or we might be blamed for letting you know that anyone could eat unripe fruit and survive. We are not going to tell you much about fruit and vegetables, because a child is not likely to want his little garden to be a kitchen garden. In case you are a town child, and have never seen vegetables growing, we may as well tell you that they take a great deal of room. We know a boy in

Germany who went to live in a ground-floor flat that had a tiny garden belonging to it, the kind of garden in which you can have three rose-bushes and a border of pinks. He was so fond of gardening that after school on a winter day he would amuse himself with a trowel shovelling the bare soil up and down; but he knew so little about it that he wrote to his aunt in England, saying he wished to grow Potatoes, Parsley, Mint, Honeysuckle, Runner Beans, and Vegetable Marrows. The aunt had to explain as well as she could by letter that in a garden of that size he could only grow about two Potatoes, and that he had better try a few Tulips and Daffodils instead. But when spring came she sent him some Vegetable Marrow seeds, and they were the source of a great and joyful excitement later in the year. The boy was away in the country rost of the early summer, and when he got back to his little garden in August he found a huge ripe Marrow and smaller ones coming on. We can't advise you to grow Vegetable Marrows, however, as they take a great deal of room, and require a mound or ridge. If you have a warm brick wall you should have a Peach, a Pear, a Golden Plum, a Greengage, or a White Heart Cherry. If you have a spare corner, plant a Gooseberry or a Currant bush. In your border try to grow a few Lettuces and Radishes, and some Mustard and Cress for the schoolroom tea.

MUSTARD AND CRESS.

The author who has survived a yearly crop of unripe plums has another vivid memory associated with her schoolroom days in the garden. She will never forget the moment when she saw her own initials growing in her own little plot of ground. There they were, made of Mustard and Cress, as if someone had written them. It is a miracle you can perform for yourself any time from the end of March onwards by drawing the letters you want in the soil with a stick, and sowing your seed in them. You must remember, however, that the Mustard grows quicker than the Cress, and should be sown about three days later. Sow both seeds rather thick, and cover very slightly, or not at all. If it is dry weather water with a fine rose every evening. People often place a mat, or even a newspaper, over the seeds when first sown, as this makes them sprout

quicker; but the covering must be removed the moment the seedlings appear. This may happen in twenty-four hours in favourable weather, so you must keep a good lookout. In spring and autumn choose a sunny spot for your Mustard and Cress, but in full summer give a moist and shaded position. Mustard and Cress must be cut the moment it is ready, while the seed leaves are tender, green, and short. If you leave it till it is more than about an inch high, the Mustard is too hot and the Cress is coarse.

LETTUCE.

Both the Cabbage and the Cos, or Long Lettuce, can be sown out of doors in little patches from March to August. First rake the soil very smooth and fine, and then, if you wish to have a big bed of Lettuces, draw lines an inch deep and a yard long, about ten inches apart. Sow your seed in these little ruts and rake your bed smooth, taking care that the seed is only lightly covered with soil. You will soon see lines of pale-green seedlings, but you will not have a single Lettuce if you don't keep off slugs. They are so fond of Lettuces that gardeners often

plant them as traps amongst Dahlias and other flowers they wish to preserve. The slugs will desert everything else for Lettuces, and can be caught in numbers on and around them at night. So if you have a sluggy garden you must catch all the slugs you can, and also dust your seedlings with soot or wood-ash. The proper time to do this is after sunset, when the leaves are a little damp with dew. When the Lettuces begin to grow up, the slugs will leave them alone, and then the rain will wash away the slight dust of ash or soot from the outside leaves.

When you have rescued your Lettuces from slugs, you must thin them severely. This is most important. You wait to do this until they are big enough to handle easily, and then you leave nine inches between each Lettuce and its neighbour in your rows. The French use the small, thinned-out Lettuces as salad mixed with Cress; and if they were washed they would be nice with bread and butter for tea—at least, they would if you had not been obliged to dust them with soot or woodashes. Cabbage Lettuces do not require tying, and are ready to cut when they have a firm heart of folded, crinkled leaves like little Cabbages.

Some kinds of Cos Lettuce require tying, but not all. Sutton's Superb White Cos does just as well, or better, without this extra trouble. But we think some of the good self-folding cabbage kinds are more suitable in a small garden. Mammoth White, Nonsuch, and All the Year Round are good kinds. Lettuces are more tender when they are grown quickly. It is best to sow a few at a time about once a fortnight all the summer, because they must be eaten when they are ready. If they are allowed to stand, they bolt—that is to say, they shoot up tall and begin to grow flowers. Then their leaves become tough and bitter, and they are spoiled for salad.

RADISHES.

In London the Radishes you buy are often big and coarse. You must try to grow them as the French eat them—crisp, small, clean, and pungent, but not acrid. There are several kinds, as you probably know—some red, some white, some round like Turnips, and some long like little Carrots. The long ones, if you fancy them, should be sown in spring, and the round and oval ones in hot weather. It is of no use to try to

grow Radishes in rough, lumpy ground. Your soil must be finely broken and raked before you sow your seed. If you live in a warm district you can make your first out-of-door sowing in February, but this would be too early in cold climates. Radishes must grow quickly and be eaten while they are young, or they are not worth having. On this account you should sow a tiny pinch of seed every fortnight, rather than a whole packet at once. They must be well thinned, as crowded plants make big leaves and poor Radishes. In early spring give them a sunny place, but when the warm weather comes sow in partial shade.

Spring Onions.

You will not want to grow big Onions, but some of the friends you invite to eat your salads may like some very little ones with Lettuces. The soil for Onion seed must be rolled or stamped quite hard and smooth. They never do any good in loose ground. You sow in March or April in shallow drills about six inches apart. When you have sown rake the ground lightly, and pat it smooth with a spade. As you will

only want quite small young Onions you need not thin them, but pull one or two when you want them for a salad. They will not be ready, however, for your early crops of Cress and Lettuce, as they grow slowly. Chives are more delicate than Onions, and are a great deal used abroad for omelets and salads. You need only get a clump of these, and if you want to increase it lift, divide, and replant in autumn or spring.

MINT.

Children who live where there is a kitchen garden will not want to grow Mint, but we have known of children who were anxious to have a plant or two of this useful and fragrant herb. Those who do must be warned that it is an underground wanderer, and will come up where it is not welcome if not kept within bounds. The plants, if they are not to spread, should be taken up, divided, and replanted in fresh soil when they show in early spring. It does best in a moist situation. Each bit must have a good root, and should be set six to nine inches from the next. The tops, three to six inches long, will root easily in summer if inserted about half

their length, with the lower leaves stripped off, in a cool border. In dry weather these cuttings must be watered after sunset. If you are a London child, and do not know where to get Mint plants, you could try to raise some yourself in this way, as Mint without roots is to be bought everywhere. You would, of course, have to buy it as fresh as possible.

PARSLEY.

Parsley seed takes some weeks to germinate, so you must not be impatient about it. Soon after its seed leaves appear, if you look closely you will see the pretty Parsley leaves coming. You should sow the seed thinly, and then thin again, first to three inches and then to six inches apart. All weeds must be kept down, as each Parsley plant should be big and healthy. When you gather do not strip a plant, but take a leaf here and there. When Parsley gets old and coarse the plants should be cut over, as then they will make new growth. Those that run to seed must be pulled up and thrown away. Your bed should give you Parsley all through the winter and spring—in fact, until your new plants are ready.

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One annual sowing in April is enough for a small supply.

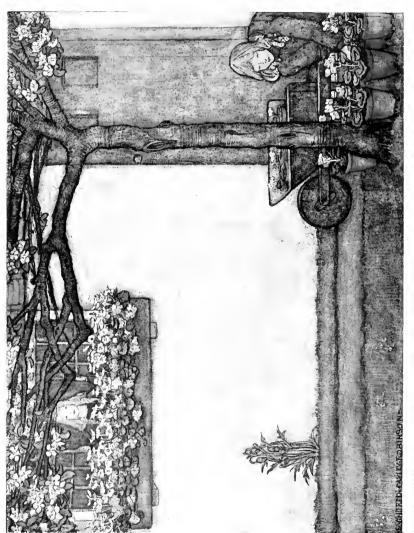
FRUIT.

We know of a lady living in a cathedral town in the South of England who has three Peachtrees (two Alexandra Noblesse and one Sea-Eagle), from which she gets more fruit than many of her neighbours who own big gardens. Even in the suburbs of London fruit ripens well, provided it is grown properly. The best Walnuts we ever ate were grown in a Surbiton garden. In the midst of a grimy city we advise you not to try fruit, as we know of no kind that would be healthy; but if you are in a country town or suburb or in the country itself, if you have a brick wall with a south aspect, and if you live in the Midlands or in some other warm corner of England, you should certainly have a tree of your favourite fruit. It is most important to get it from a first-rate grower, to prepare the ground properly, and to plant it well. November is the proper month for planting. You must get someone to dig a large hole at least two feet deep, and put in plenty of manure for the roots to find when they grow down. If your tree is to be against a wall, put the main stem up against it before you begin, and then spread out the roots carefully in the shape of a fan. Any that are growing straight down must be cut off. Those that remain will be on different levels, so you must arrange the lower ones first, and put soil amongst them, then the next, and so on, till they are all comfortably spread out and covered. The hole in which you plant a tree should be rather bigger than its roots when spread out, and about a foot deep. finished, the uppermost roots should be four inches below the soil. If you are going to grow it as a tree, and not against a wall, you must tie it to a strong stake directly it is planted. In this case you must take care that the rope you use does not chafe the bark. A short length of old hosepipe or a band of hay is usually put between the rope and the tree where they touch each other. If the tree is to be trained against a wall, you must first cut off all damaged or broken branches, and then spread out those that remain in the shape of a fan. For this purpose you will want some little bits of cloth, a hammer and nails. Before you do it you should look at some well-trained fruit-trees carefully, and try to find

out how they are done. But if you can possibly get a skilful gardener to plant your tree for you, we strongly advise you to do so, as a newly-planted fruit-tree should be cut back more or less, according to its variety and vigour. Pruning is also an operation that requires more skill and knowledge than any child can be expected to acquire. It should be done for you by the grown-up gardener. For a year or two a young tree will not require much pruning, and will not bear much fruit. If much fruit sets it should be picked off at once, or it will weaken the tree. All shoots from the roots should be cut off at once with a sharp knife.

If your wall is covered with climbing flowers, so that you have no room against it for a Peach, a Pear, a Plum, or a Cherry, you might find a corner for a Gooseberry bush, or a Red or White Currant. In the North of England you must put your Gooseberry or your Currant in the sunniest corner you can find, or the fruit will not ripen. In the South a little shade and moisture will suit it better. Gooseberries and Currants will prosper in any ordinary good garden soil, but the places for them should be well dug and





dressed with manure some time before planting. They must not be put in too deeply, or the roots will send up suckers. October is a good month to plant.

Red Champagne, Yellow Champagne, Red Warrington, and Early Sulphur, are good Gooseberries; Raby Castle and Comet are good Red Currants; White Dutch is the best White Currant.

Gooseberries and Currants are liable to be attacked by caterpillars in May, and these will eat all the leaves and destroy your crops if not removed. Hand-picking is the best way. You can also first syringe with soft water in which you have put a little soap, and then dust with a mixture of dry soot and lime. This will look ugly for a time, but rain soon washes it away.

Both Gooseberries and Currants require careful pruning in the autumn. The main branches should be shortened to six inches, and the side shoots to two or three buds. You always cut just above a bud, upwards and slantwise. You begin on the opposite side from the bud, and end cleanly just above it. Always choose a bud that means to grow out from the tree, and not inwards.

CHAPTER XIV

WINDOW, ROOM, AND JAPANESE GARDENS

IF you are fond of flowers, and cannot have even a small garden, perhaps you can have a window-box, or some plants in pots or bulbs in glasses. A window garden should face south, east, or west, so that it gets plenty of sun. you are obliged to have a north window you must grow plants that do not need much sun, such as Creeping Jenny, Musk, Golden Privet, Euonymus, Crocuses, Snowdrops, and hardy Ferns. Have your window-box made as long and as wide as the window-ledge will allow, and see that there are several holes bored in the bottom to allow waste water to run away. There must then be a layer of broken pots for drainage. The earth with which you now fill the box must be the very best you can obtain—if possible, a mixture of good loam, leaf-mould, and sand.

In front you should put plants that will hang down, such as Petunias, Nasturtiums, Convolvulus, Carnations, Canariensis, Musk, or the Ivy-leaved Geraniums. The Giant Nasturtium and Convolvulus and Canariensis can all be grown from seed sown early in May, and they can either hang or climb upwards round strings or wires put for them from an upper window to your box. You must, of course, study the colours of the plants you grow in this way, and not choose Petunias and Nasturtiums in one season. Alternate pink Petunias and pink Ivy-leaved Geraniums would look well hanging down. Behind them you could have a row of pink Geraniums standing up, and behind these a row of white Marguerite Daisies. Another pretty combination would be Creeping Jenny to hang down, then Heliotrope, and then yellow Marguerite Daisy. In London the Heliotrope might be a little uncertain, as it likes pure air, but Calceolarias should thrive if properly treated, or mauve Violas. A box filled with healthy plants in the first week of May should flower till late in September.

You must never let your window-box get quite dry, and never water your plants when

the sun is on them. Give a good soak (not a sprinkle) every evening after sunset. All faded flowers and dead leaves should be carefully cut off, and a little Clay's Fertilizer—a teaspoonful to half a gallon of water—given once a fortnight.

In the autumn, when your summer flowers are over, remove them, roots and all, and turn over the soil well with a hand-fork. If you can add some fresh soil, so much the better. Then fill your box with bulbs for the spring. You might put Snowdrops, or Crocuses, or Siberian Squills in front, and then Daffodils of medium height, such as Princess Victoria, Sir Watkin, or Golden Spur. The back of the box can either be filled with small evergreen shrubs or with late Daffodils, such as Emperor or Empress, or with Hyacinths and Tulips. A box filled entirely with Tulips will make a splendid show for three weeks. When a hard frost comes, or rather a little while before it comes, you should protect your bulbs with a covering of cocoanut fibre.

For many years of her life one of the authors of this book was obliged to live mostly in London without a square yard of garden, but so great was her love of flowers and her desire to grow them that by degrees she made a 'room garden' for herself, and found endless interest and pleasure in it. She was prepared from the first to spend some time each day in feeding, washing, watering, and shifting her plants; otherwise success would have been impossible. Unfortunately, most of us know how miserable neglected or misunderstood plants soon get to look in a room—their leaves yellow and dusty, their flowers stunted, their soil either baked hard for want of water or sour and mossy through having more than they can digest.

We fear that if you are unlucky enough to have gas in your room you cannot have healthy plants at all—at any rate, you would have to content yourself with one or two that you could carry out of your gas-poisoned air every evening. But if you have no gas, and a sunny window in which you can place a good-sized plain wooden table, you may have a delightful room garden, as well as some pot plants in other places. To begin with, you would want some of the well-known hardy foliage plants that you can get from any good nurseryman. One of the best

known is the Aspidistra, or Parlour Palm. You can get it with plain green or with variegated If it is in good health it sends up new leaves every spring, and makes queer dwarf flowers. When it seems too crowded for its pot you can either give it a bigger one, with some fresh soil, or divide it. This should be done in April or May. Young gardeners often make the mistake of giving a plant too big a pot when they change it. They hope in this way to persuade their plant to grow to a great size, but what they really do is to give its roots more soil than they can keep healthy, so it languishes or dies. One, or at most two, sizes larger than the last pot should be used, or, in the case of Aspidistras, you can divide and repot into the same size, or even smaller ones. Some people say these plants are impatient of disturbance, but we have found them easy to manage with a little Never use pots that are not both dry If they are dirty they must be well and clean. scrubbed with soap and hot water, and then well dried before you use them. You must also get a little good soil from a nursery gardener before you divide or repot any of your plants.

Besides Aspidistras, you can have some of the hardy Ferns, of which the Holly Fern is the most enduring; Aralias, which look like little Fig-trees; Indiarubber plants, whose young unfolding leaves it is such a pleasure to watch; various hardy Palms (Phœnix and Kentia, for instance); and some of the hardy Cactuses. The Indiarubber (Ficus Indica) and Palms are plants that you must be careful not to overpot. We know that from sad personal experience, as well as from some of the great authorities. In our early gardening days we often used to get a healthy Palm or Indiarubber from a good nursery, thinking when we bought it that the nurseryman was rather stupid and neglectful to leave the poor thing caged in that little pot of hard soil. We would bring it home, turn it out, find its roots in a thick mat, plunge them into a pot about four times the size of the old one, full of nice, loose, fresh soil, and expect it to grow like Jack's Beanstalk in its happy new conditions. The ungrateful thing usually died. So remember that if you repot Indiarubber plants and Palms at all, take a pot only slightly larger than the last. Remember, too, that if you over-

water an Indiarubber plant its leaves will turn vellow and drop off, while Palms must not be allowed to suffer from drought. It is death to nearly all plants to be allowed to stand in stagnant water. We mean that you must not leave the water in the saucer that has run out of the When a plant is dry it is a good plan to plunge it in water nearly, but not quite, up to the brim of the pot, and to leave it there till the top of the soil is moist. That will show you that it has had enough to drink, and it should then be lifted out and allowed to drain before being replaced in its saucer. If you let plants stand in stagnant water day after day, they soak up more than they can digest—their leaves turn yellow, their roots rot, and they die. You can generally judge by the state of the pot whether you should give water. At least we know one good amateur gardener who would never water a plant in a moist pot, but only one in a pot that felt dry to the touch.

All foliage plants must be sponged once a week with a soft sponge and lukewarm water, as dust chokes and kills them. If you can put them out on some leads after sponging and

spray them well with a syringe, so much the better, but this must be only done in mild weather. Remember, too, not to use ice-cold, hard water from a tap. In summer let them stand out in soft warm rain as often and as much as possible.

Many pots in plants die of starvation. When you drench them with water, the water that runs off carries plant food with it, and this is often not replaced. We used to use a little Clay's Fertilizer, about half a small teaspoonful to a half-gallon of water, well mixed; but lately we have used Shefa, a new kind that is especially suitable for ferns. These liquid manures must never be given more than once a month, and never to flowering bulbs.

If you have more plants than will stand on your table in the window, you must shift some of them every week, and bring those that have had several days of semi-darkness to the light. You must also be careful not to let your plants stand in a draught. It is most injurious to them, especially when it is a cold one. If you have a light bathroom, with a good-sized window, and are allowed to use it, you would find it a

help, as the air of a bathroom is sometimes steamy, and never as dry as that of a sittingroom. You could put plants that you wanted to nurse there, and more especially a succession of bulbs when they have made their roots in darkness and first need the light

The real joy and glory of room gardens are the flowering bulbs, and the more you can have the better; but grow a few of many kinds rather than many of a few kinds, because then you will have a longer and more continuous succession. You do not want your room overcrowded at one time, and then empty of scent In September you should muster and colour. your glasses, bowls, and pots, and decide what you want and can afford to buy, and you must also choose what you will grow your bulbs in. Hyacinths, as you no doubt know, do well in water, and nowadays you can buy pretty squat glasses instead of the ugly tall ones we used to have. The bulb should almost, but not quite, touch the water; if it gets sodden, blue mould forms on it, and it decays. Crocuses are also grown in water in small glasses sold now for this purpose. The early Roman Hyacinths and the

Polyanthus Narcissus will also flower well in this way. When you grow bulbs in water you will find that you must often add a little. The amount a Hyacinth in flower will drink is surprising. Many people change all the water in their bulb glasses once or twice in the season. A scrap of charcoal in each glass keeps the water clean and wholesome.

Many mixtures for growing bulbs are recommended. The one we like best for bowls without drainage is gravel mixed with a little carbon. You buy it in little sacks mixed ready for use at any of the big London shops that have a gardening department, and probably at any good florist's elsewhere. Moss-fibre is satisfactory, too, but the gravel is cleaner to handle, and the carbon keeps the water sweet. From the moment that bulbs are planted in bowls they must not be allowed to become quite dry. If you think there is too much water, however, you must put your hand over the top of the bowl to keep your bulbs in place, tilt it a little, and drain off the water. For ordinary flower-pots a mixture of leaf-mould and sand is good, and while these are in the dark you must not water much, or the soil will get

sour and unhealthy. In planting bulbs for a room garden, do not set them deeply in the gravel or moss-fibre. The point of the bulb should just show above ground. This applies also to bulbs grown in ordinary pots. Whatever medium you use should be damp when you finish your planting. Your bulbs must then be put into a dark, cool place for four weeks to make their roots. An airy cellar is good, but many people use a cool cupboard. They usually choose one that is sometimes opened, and therefore aired for a moment. At the end of the four weeks the bulbs must be brought into a light and cool, but not cold, place, and it was at this stage that we found a bathroom window so useful. When the green is well up and the flowers beginning to show, they may be moved to a light place in your warm sitting-room.

The first bulbs to push up are the white single Roman Hyacinths. These, if planted in September, will bloom in November, and will give you a little of the promise and fragrance of spring in the dull, dark days. Two dozen bulbs would be enough to buy, and of these one dozen should be started in September and the other

dozen in October for succession. Next come the red and yellow Duc Van Thol Tulips, Crocuses, Trumpet Daffodils, and Hyacinths. The two earliest Daffodils are Trumpet-Major and Sir Henry Irving, and they should be planted in September. The Hyacinths look well either singly in glasses or three together in a bowl. In October plant some of the later Daffodils-for instance, Golden Spur, Princess Victoria, Emperor, and Empress. These may all be treated in the same way: set in gravel with a little carbon added, kept from frost and in the dark for four or five weeks, then brought to a cool, light place, and, when in bud, to the warm room. The Japanese Sacred Lily, which is so largely advertised, is only a large kind of Polyanthus Narcissus. It is easy to grow in a sunny window; but we should always buy Narcissus Gloriosa instead, as it is very like it, just as sweet, and about a quarter the price. All these Polyanthus Narcissi bloom well in pots without drainage, and if you have a blue-and-white bowl you should fill it with the one called Soleil d'Or. Scilly White, too, is easy to grow in a room.

So far our description of the room garden has dealt with foliage plants and spring flowers, but there are also many summer flowers that do well in a light window. In most parts of England the cottage windows show you that. For instance, you often see the blue or white hanging Campanula Isophylla, such a mass of flower that it covers the pot. It is an easy plant to manage and propagate. If you get a healthy specimen of it in May, it should flower all the summer. In the autumn cut it back a little and give a mild dose of liquid manure. It will flower for years without being repotted, and can be increased by cuttings put round the edge of a pot and stood in a window. Gardeners always put anything they want to strike near the edge, and not in the middle of a pot. Begonias make handsome room plants; so do Fuchsias, Heliotropes, and Geraniums. We have seen a big plant of Heliotrope that had lived for years in a Paris window, but it does not like the sooty air of our big cities. Some of the vigorous Ivies grow well in pots, and in Germany you often see them trained round picture-frames. We once brought a spray from the country that was so determined to grow that

it rooted itself in an earthenware jug, lived for more than two years on an occasional drink of fresh water, and only died when we were away from home and could not attend to it. Geraniums would rather be dry than wet. The pretty white Spiræa and the little trailing yellow Musk are both very thirsty plants, and flag at once if you neglect them. The Vallota Purpurea, the Scarborough Lily, is a splendid window plant. When once you have potted it you should not disturb it, as it flowers best when it is almost bursting the pot with its big onion-shaped bulbs. The Vallota never cares to be wet, and after it has flowered it needs very little water; yet it must not become bone-dry. You will say these are difficult directions, and we can only agree with you. Gardening is an art that in the end must be largely learned by experience, and the earlier you begin to practise it the sooner you will find out some of the things all the books in the world cannot tell you. You cannot give a recipe for watering as you can give one for a cake or a pudding, because the same plant will need different quantities in different conditions and at different times. When you see leaves flag in their flowering season, they probably want water; when they turn yellow and drop off, they have probably had too much. In winter you must not water in a room likely to feel frost at night, as that would help to freeze the roots. You are sure to have some failures and some successes with your plants to the end of your gardening days, but every failure ought to teach you, and every success will spur you on. The true gardener loves his art so well that he will grow what he can even under difficult conditions.

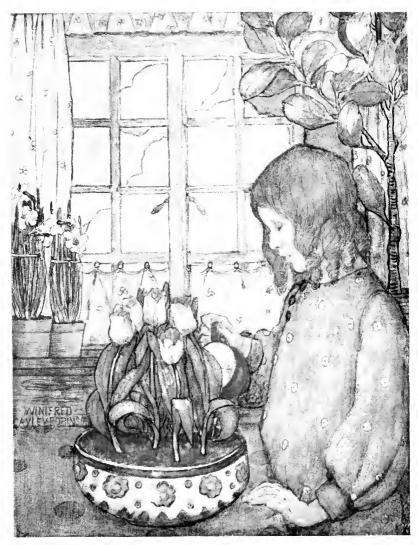
THREE GOLDEN RULES FOR THE ROOM GARDEN.

Keep your plants free from dust on their leaves. Keep stagnant water out of their saucers. See that those in undrained bowls are just moist, but not wet.

Give all the light and air possible, but remember that draughts are injurious.

THE JAPANESE GARDEN.

This is the story of a Japanese garden made by one of the authors when she was in her London home, and had to grow all her plants in a window-



A ROOM GARLEN IN SPRING.



box and in a room. The Japanese, as you probably know, think that size in a garden does not matter, provided that everything is in proportion, and they produce the most wonderful effects of landscape gardening in a small space. The one in the room was copied as nearly as possible from a photograph of a real one. To begin with, a zinc tray was made, five feet long, two feet wide, and four inches deep. At one end a hill was arranged of good-sized stones bedded in earth. Halfway up the hill grew a dwarf Japanese Fir-tree. was really in a pot, but the pot was hidden by Moss and stones. On the other side of the hill. a little lower down, there was an Orange-tree, covered with small red oranges. These are to be had at any good flower shop for five shillings. The Orange-tree lasted a year with care, but the Firtree lasted five years in London, and is still alive in a West Country garden. Down the centre of the hill a staircase was made of small, flat stones wedged into the earth, and beside this several sorts of tiny hardy Ferns grew. At the base of the hill a good many plants in pots were arranged to look as natural as possible, but all the pots were bedded in earth and covered with Moss.

paths were arranged with flat stones, and one of them led to the lake. This was made of a green earthenware dish eighteen inches long and an inch and a half deep. Ferns hung over its edge, and one or two hardy water-plants grew on its surface, while over a corner of it there was a wooden bridge. At the back of the lake there was a tall Umbrella Fern that looked like a Bamboo. Stones were artfully arranged so as to break the straight lines of the dish, and in the spring bulbs grown in very small pots were flowering near it. Some of the miniature Daffodils do well for such a purpose, and so do Crocuses, Snowdrops, and Squills. The dwarf Japanese trees you need for such a garden are rather expensive, but if you do not mind that you can get many beautiful kinds. Any of the Japanese curio dealers would sell little china temples, houses, lanterns, and figures that add to the quaint charm of a garden made in this way. If you please, you may call it artificial, but that is a word you may apply to any form of gardening. When you have made your Japanese garden with great skill and patience, and kept it in good order by unfailing care and attention, you will be rather vexed if other people who cannot keep a Fern alive exclaim: 'Very curious, certainly, but quite artificial.' Of course you will smile politely and say nothing, but in your mind there will be some lines from Shakespeare's 'Winter's Tale' which will comfort and support you. They come in that scene where Perdita says so many beautiful things about the flowers in her garden—when she talks of the Marigold that goes to bed with the sun and with him rises weeping; and of Daffodils that come before the swallow dares, and take the winds of March with beauty. But in her garden she has no streaked Gillyvors (Stocks), and she tells Polixenes, the King, that she will not grow them because they are 'artificial.' 'There is an art,' she says, 'which in their piedness shares with great creating Nature.' And Polixenes answers her:

> 'Say there be; Yet Nature is made better by no mean, But Nature makes that mean: so, o'er that art, Which you say adds to Nature, is an art That Nature makes.'

But you mustn't take this quotation as an excuse for carpet-bedding.

CHAPTER XV

CALENDAR OF WORK

JANUARY.

Unless you live in a warm corner of these islands and have a sunny garden, you will not be able to do much this month. If you have any empty ground it should be dressed with manure, dug on a mild day, and left with a rough surface. The frosts then help to break it up, and when spring comes it will be powdery and friable.

Fruit-trees should be dusted after a slight rain with slaked lime or fresh soot, as this kills moss, lichen, and the insect pests that lodge in the rough places of the bark.

Iris Stylosa should be flowering now in the South of England, and even in colder climates under a south wall. Slugs are fond of these plants, and eat them up when they are in bud. If you notice that this is happening, you must

dust with wood-ashes or soot. Gather the flowers with a sharp upward jerk when in tight bud, and put them in a room in tepid water to expand.

Snowdrops, Winter Aconites, Crocuses, Squills, early Daffodils, and Grape Hyacinths will all begin to push towards the light this month. When they are growing in heavy soil that cakes badly, you help them by carefully loosening it a little with a hand-fork. You must not do this in frosty weather.

All delicate plants will need protection now. A piece of rough matting supported by sticks at the corners is enough for many things. It is not a bad plan first to stretch a piece of wire-netting across the sticks and fasten it securely. By day it lets in light and air, and at night the mat or sacking is easily thrown over it. If ever you are on the Riviera you will see the gardeners put their plants to bed every evening as carefully as if they were children, while in this country, where much cold is expected, you see numbers of plants in any well-tended garden protected the whole winter with coverings of bracken or matting. When the plant you want to protect is below ground (a delicate bulb or tuber, for instance, or

one that quite dies down in winter), you need only pile on manure or ashes or dead leaves to act as a blanket. We know someone who grew tuberoses successfully out of doors in a Cornish garden, and in the winter he protected them with little heaps of ashes, which he did not remove till the May frosts were over. most parts of England manure is used as a protection for Roses and slightly delicate climbers; but a skilful gardener will shelter many of his delicate plants with little tents that he makes of twigs and bracken. We have seen them all shapes and sizes in a North Country garden where many rare things are grown. Some enclosed the plant altogether, and some gave it shelter, but let in sun and air on the south side.

This is the month when seed lists arrive, and remind you that spring is coming. Remember that it is easier to buy seeds than to grow them well, and do not order more than you have room for, or any requiring conditions you cannot give them.

FEBRUARY.

All weeds should be destroyed this month, both in the path and the edging, as well as in the

border. If you have Dandelions or Hemlock, cut their heads off, and cover the remains with common salt. Plantains and most other weeds may be killed in time in this way.

Perhaps you remember that line in Tennyson about Geraint glancing at Enid 'as careful robins eye the delver's toil.' You are sure to think of it this month when you begin to fork over your garden, for wherever you turn the soil there you will see a robin with its red breast and bright eyes looking for food. Never drive one away, for they eat wood-lice, grubs, and worms, but do no harm to plants. A nice big toad—not a frog, but a rough, grey toad—is a most desirable friend, too, as he will eat ants, wood-lice, and flies. Ants are sometimes most mischievous in a garden. They do not eat plants, but they eat certain aphides they find on the roots. Anyhow, they will kill your pet plant if they are so inclined. You see it turn yellow and die, and when you take it up you find its roots gnawed away. do not pretend that this is a scientific description of what happens, but only one we can relate out of our own sad experience. We once built a wall with great care, meaning to grow many beautiful rock plants on it. We could not understand why they flourished for a time, and then died. Then we found the ants and tried to kill them in various horrid ways that made us feel like inquisitors. We won't harrow you with them, because they were not only cruel, but useless. At last we asked one of the best gardeners we knew what he did when one of his plants was attacked by ants, and he said he only knew of one thing to do, and that was to remove the plant.

Lady-birds, as well as birds and toads, are friends in your garden, as they eat aphides—what the little girl in one of Anstey's stories calls 'those horrid little green atheists.' Sparrows you must keep away this month with black cotton amongst your Crocuses if you want to see the flowers whole and upright. When you find their yellow petals strewn on the ground, you will know that the mischievous birds have been at them. In mild springs some of the herbaceous plants begin to push up young leaves this month. The Phloxes are amongst the earliest. Look out for slugs, or they will devour the early shoots of many plants, often so greedily that the plant cannot recover.

Japanese Lilies are now arriving, and should be planted in peat and sand. The sand keeps off slugs and attracts moisture. They should have a thick dressing of manure on the top to keep out frost.

Sweet-peas may be sown this month without harm, but it is too early for your other seeds, as long as you depend on an outdoor garden. The impatient, inexperienced gardener reaps nothing but failure when he sows too early. If you are lucky enough to have a frame, you will find it most useful, even though the elaborate, costly hot-beds described in gardening books are beyond your reach. A simple hot-bed can be made with some manure, which must be put in the frame and turned over two or three times with a garden fork. It is then spread out flat, and covered with good garden soil. You can either sow your seeds in this soil or put your seed-boxes on it a few days after it is made. If a hot-bed cannot be made you can fill your frame with cinders, and place your seed-boxes on them. The boxes must be lifted in some way, so as to be near the glass, or the seedlings would grow spindly. On warm days you must open your frame and let in air, or the soil will turn sour and mossy. In showery weather let in rain, and in a drought water judiciously. The four elementary things to remember about seeds grown in a frame are: they must be raised in some way, so as to be near the glass; they must have air to keep the soil healthy; they must be shaded from strong sunshine; and they must be moist, but not too moist. You do not want them either to be withered by drought or smothered by moss.

MARCH.

This is a busy month in the garden. When it 'comes in like a lion' you have to sit idle; but directly there are mild, dry days you should be at work. Wherever you mean to sow seeds the ground should be well dug, and then raked smooth and fine. If you just rake the top, and leave the soil beneath in a hard cake, your seeds will be like those sown in the parable that fell on stony ground and had no depth of earth. They will spring up, but they will have no roots, and when the sun comes they will wither away. In a cold climate Sweet-peas and Mignonette should

not be sown till the middle or end of this month, and most other seeds will do better if sown in April. March is too early for Nasturtiums or Convolvuluses, two flowers most children wish to grow.

Towards the end of the month you can divide those herbaceous plants that are not spring-flowering, if you wish to increase them. You must not disturb plants that are just going to flower, but all the strong kinds will stand division and transplanting when they have only sent up young leaves. For instance, you could take up a Phlox, a Michaelmas Daisy, or even a Pyrethrum, on a showery day, pull it to pieces, and find that every bit made a strong plant by the autumn. In the rock garden the mossy Saxifrages that have bald places in the middle should be taken up, divided, and firmly replanted. This is the way to treat many little rock plants that grow themselves shabby in a year or two.

Any new hardy perennials you want may be planted in favourable March weather, and so may the autumn-flowering Gladioli.

APRIL.

Most of the hardy annuals may still be sown this month. Those sown in March will be coming up, and you must remember what we told you about the importance of thinning out. In some gardens nearly all annuals are raised in boxes, and pricked out in the borders where they are to bloom. We tell you this because you may belong to a garden where you can get all the annuals you need given this month in the shape of little ready-made seedlings. You must plant them several inches apart on a showery day, and shade them from the sun at first; a tent made of four sticks and a newspaper will serve when there is no wind. As soon as they have taken root, and look well established, it is a good plan to pinch off their tips with your thumb and finger, because then they will make spreading side shoots, and give you more flowers. You can pinch most of your annual and herbaceous plants in this way when they are young, but you must not do it to any plant growing from a bulb or a corm, such as a Lily or a Gladiolus. Some tuberous plants, such as Dahlias, may be pinched with advantage.

Roses are pruned in March or April, but the different varieties need different treatment. You must get some good advice about your special kinds, or be content to cut away the deadlooking wood. The green fly begins this month, and you should keep your Roses free from it, either with an aphis brush or by spraying with quassia chips and water as recommended on p. 126.

Weed hard this month, as you do not want any weeds to seed themselves, and they will do so if you neglect them.

MAY.

The leaves of your early-flowering bulbs will now begin to look shabby, but you must put up with that if you do not mean to throw away your bulbs or to lift them carefully to the wild garden. Daffodil leaves may be tied up with string or raffia if they are sprawling over seedlings, or over plants you want seen. Weeds grow fast this month, and should be diligently removed. Gardeners weed with a Dutch hoe, but it is an implement that does more harm than good if unskilfully used. You will find when you first

try to use one how easy it is to damage the young shoots of your treasures with a hoe, and that in a crowded corner it is far safer to weed with a knife or a small hand-fork.

The middle or the end of May is an exciting time in gardens, because we then bring out our half-hardy plants. Dahlias, delicate annuals, and bedders are all put into the borders when the early May frosts are over. If possible, this should be done in showery weather. Two or three dull, damp, warm days save a gardener a deal of trouble in shading and watering at this time of year. In case the weather is fine and dry, however, remember that a great deal can be done by planting each plant in a little puddle of water and shading it with a flower-pot or a box, or any little tent you can invent. When the nights are warm these coverings can be removed at sunset and replaced in the early morning. You will have to judge in each case how many days of such care a plant requires. When its roots are well established, it will look after itself by day as well as by night.

You know, of course, that plants must never be watered when the sun is on them. Nevertheless, if ever you see a plant flagging badly in the sun, and plainly dying for a drink, you may give it one carefully at its roots. Do not let the water touch its leaves, and, if possible, shade it for the rest of the day.

A great many biennial and perennial seeds are sown in May, for a gardener must work for the years to come as well as for the present one. It is a good plan to try to grow one biennial and one perennial every year, as two boxes of seedlings do not give you too much work. Be sure to get your seed at one of the best places, for nothing is more disappointing than to take great pains with inferior seed.

Look carefully at your Rose-trees every day this month, and remove any leaves that are curled and stuck together. Each one contains a grub, that will become a caterpillar and devour the foliage of the tree later on. Leaves that are merely curled by cold, and not stuck together, must not be picked off.

Convolvulus seed may be sown in the open this month.

June.

Many plants will now require staking. We have told you how this should be done at the end of the chapter on 'Hardy Perennials.' Towards the end of the month you will find the leaves of Crocuses and Snowdrops quite dead, so that you can remove them without injuring the bulbs. At the beginning of the month you can still put out bedding plants, half-hardy annuals, and biennials. A plant may be put into the open ground out of a pot at almost any time of the year. It is the safest way of transplanting in hot weather, but you must distinguish between plants that have been honestly grown in pots and those that a nurseryman has potted from boxes a day or two ago. When the soil falls away and leaves the root and stem quite bare, your plant will want care and shade as much as if you had just pulled it out of a box yourself.

Your Primroses and Auriculas should be taken up and divided this month if you wish to increase them. Let them spend the summer in a moist, shady corner of the garden. You will probably lose them all if you plant them where it is hot or dry.

JULY.

During this month and the next, when the soil is heated by the summer sun, you take cuttings and pipings, and make layers of the plants you wish to strike. Pinks are increased when they have done flowering, but the young shoots of the Carnation are often layered while the older shoots are still in flower.

Daffodil leaves should now come away with a touch, and without injury to the bulbs. Every day this month you should visit your garden with a pair of scissors, and cut off all dead flowers and all annuals that are going to seed. Not one Sweet-pea must be allowed to make a pod, and your Mignonette will have a longer flowering season if you can cut off the green seed-vessels directly they appear. Perhaps you will like some of your Love-in-a-mist to form its hand-some seed-pods and sow itself for next year. One pink Canterbury Bell, too, would give you seed enough to fill a big garden; but its seedlings will probably not be pink if you have allowed blue and white ones to grow near it.

When your Lupins, Pyrethrums, and Delphiniums go out of flower, you can either cut off

the flowering stems and leave the rest of the plant, or you can cut down the whole plant close to the ground. When you cut down severely you should give a little extra food in the shape of manure, bone-meal, or Clay's Fertilizer. did not include Pyrethrums in our short list of perennials, because they are rather capricious: easily managed in some gardens, and bad-tempered in others. Slugs devour them. If they are given to you, and you want to cut them down, do it rather gingerly, and in damp, dull weather. We are not speaking by any orthodox tradition, but out of our own experience, as we have lost many a fine clump through being told that they could be cut down sharply after flowering. In dry weather the operation kills them.

August.

The chief things to do this month are to enjoy your garden, to cut your flowers, and to keep things tidy. Pinks, Pansies, and Carnations may be increased in the ways we have explained. If you have Rose-trees of your own, or are allowed to take a few cuttings from other people's, you should try to grow some on their own roots. We have told you how to take the cutting and how to plant it in the chapter on 'Roses.' The bulb lists arrive this month, and you must decide what bulbs you want for autumn planting.

SEPTEMBER.

Your spring-flowering bulbs should be planted this month. In some cases it cannot be done, because their places are not vacant yet, or because you mean to dig over your whole garden later in the autumn. But where complete reorganization is unnecessary, try to find room for your bulbs as soon as possible.

If you have any biennial or perennial plants grown from seed sown in May, they should now be strong and big enough to transplant to their flowering quarters. This is an operation you can carry out either in autumn or spring, but not in winter. Frost soon kills plants that have not had time to take a firm hold of the soil.

Autumn brings much labour in the garden in the shape of tidying, weeding, and preparing for next year. Annuals that have become shabby may be pulled up and thrown away. They will leave a bare place that you must dig over well. Before you replant it you must consider whether what you are going to plant would like a little manure beneath its roots, or as a blanket on the top. A greedy annual has probably impoverished the soil.

Herbaceous plants that flower in spring may all be divided and reset now.

OCTOBER.

In October great operations are carried out in herbaceous borders. New plants come in from nurserymen or friends; old ones are cut down, fed, and in some cases divided; seedlings are put in groups where they are to flower. These things are done all through the autumn, according to convenience. In a mild district you may go on till Christmas planting out and reorganizing your borders. In a cold one get it done at the end of summer, before the frosts come. Any bulbs you have not planted in September should go into the ground now.

NOVEMBER.

There is still plenty to do in the garden on a fine day. In a wild garden or shrubbery some people leave all the dead leaves lying. We think that this is advisable in a big country garden, but not in a small, compact town one, that should look trim and well-tended. Your flower border you should keep as neat as your bedroom. weeds, dead leaves, and rubbish must be removed now, and if you have plants that need protection you will give them tidy heaps of manure, ashes, or dead leaves. See that the labels and sticks marking plants and bulbs are firmly in the ground. Cut down herbaceous plants that have done flowering. Throw away the annuals that have become shabby. Lift your Dahlias on a dry day, cut their stems to within three inches of the crown of the roots, and put them, stem downwards, in an airy place to dry. During the winter they must be kept from frost, but not altogether from air. They are often stored in a shed, or on the floor of a cool greenhouse.

Remember that this is the chief month in the year for planting Roses, and do it at the beginning rather than the end.

Any part of your garden that is empty may be dug over and manured now. The surface should then be left in a rough state, so that the winter frosts can work the soil well, and prepare it to receive seeds and young plants in the spring.

DECEMBER.

November and December are two most important months in the gardening year. All the digging and the alterations you have planned during the summer are taken in hand now. In a cold climate you would be careful to finish your planting early in November, but in the South and West of England you might still be busy with a new rockery or a new flower border. Even in the South you must now expect winter weather, and should complete your preparations for protecting delicate plants. One of the enchanting discoveries you make when you become a gardener is that there is no 'dead' season in these islands. In the milder corners you may have Roses, Violets, and Primroses all through the winter, while the early spring bulbs push their spikes through the soil before you have gathered your last Chrysanthemum. But even in a cold climate, when all your plants seem to be asleep beneath the snow, you can be busy indoors for your garden. It is a good plan to

make plenty of large wooden labels, as the little ones you buy are easily lost. If you have the use of a shed or an attic, you may wish to repaint your watering-can and wheelbarrow; and out of doors you can sort all your stakes, and point those used for Sweet-peas with a sharp, strong knife. Besides, you will probably have some bulbs and foliage plants indoors that require your care.

If you have any Christmas Roses (Hellebores) in your garden, it is well worth while to make a roof over them with strong stakes and sacking. Then the air can get in at the sides, but the roof prevents the rough winter rains from splashing their faces with soil. When Christmas is over you have January, the worst of the winter months, before you, and after that you will say to yourself every day that 'spring is coming.' Even during a cold February the lengthening afternoon lights say this to you a little clearer every week, and during the spell of mild weather that nearly every February brings you will find many other promises of spring in your garden. So the year goes round for us, a tangled tale of work and pleasure, success and failure, hope and disappointment. The great gardener must

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be wise and humble, or he would not be great; so he knows to the end of his days that he has much to learn. The child who first plants his little plot should also teach himself this lesson. Then, if he observes his plants attentively and patiently, he will in the course of years become a gardener.

'Who loves a garden
Still his Eden keeps,
Perennial pleasures plants,
And wholesome harvests reaps.'

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