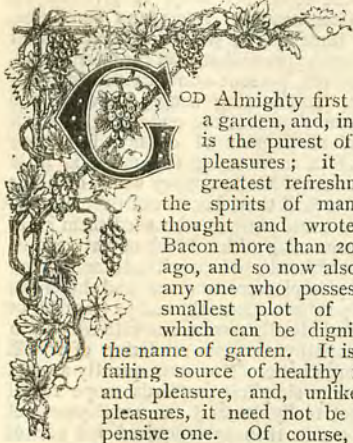


## SOME TALKS ABOUT GARDENING.



**G**OD Almighty first planted a garden, and, indeed, it is the purest of human pleasures; it is the greatest refreshment to the spirits of man"—so thought and wrote Lord Bacon more than 200 years ago, and so now also thinks any one who possesses the smallest plot of ground which can be dignified by the name of garden. It is an un-failing source of healthy interest and pleasure, and, unlike most pleasures, it need not be an expensive one. Of course, money can be spent over the garden as

well as over the house, but for very little outlay very much enjoyment can be obtained. Two things are necessary—love and labour, which must be bestowed ungrudgingly, for endless is the care and patience required.

Yet what a charm there is in the work and how endeared to us do the flowers become! How often do we hear the plaintive cry, "My poor little veronica is dead!"—overwatered, perhaps, or left in a draught, one day's neglect having killed the object of weeks' solicitude. You cannot exercise too much attention upon your plants, for they will amply repay you. And by living amongst them and studying their habits, their likes and dislikes, their birth and their death, you will learn deeper and truer lessons from the Book of Nature than any reading can teach you. You will see the work of the Almighty in its most delicate form. You will realise the truth that the glory of Solomon was not to be compared to the natural beauty of the lilies of the field. You will see the same wonderful and mysterious laws of life manifested and fulfilled in your plants as in yourself. They have their times of growth and rest as you have; they need air and nourishment as you do; they are grateful for love and thought as you are! They are links in the chain of creation.

This is what Longfellow says:—

"And the poet, faithful and far-seeing,  
Sees, alike in stars and flowers, a part  
Of the self-same universal being  
Which is throbbing in his brain and heart.

\* \* \* \* \*

"In all places, then, and in all seasons,  
Flowers expand their light and soul-like  
wings,  
Teaching us, by most persuasive reasons,  
How akin they are to human things."

Now having, perhaps, interested you a little in our subject, let us talk more practically. The variation of the seasons is the first thing to be considered: summer, with its long days and warm weather; winter, with its long nights and cold weather; and the intermediate seasons of spring and autumn. The gardener's year properly begins in spring. It is then that seeds are sown, and plant life begins to revive after its long season of inanimation. No particular date can be fixed upon which planting and sowing should begin, as in our variable climate much must depend upon the weather and the state of the ground. Night frosts in May (not at all uncommon) will undo all that has been done in April. The earth should be warm and fertile, and the weather "open," before any attempt be made

to sow the seeds of annuals that are at all delicate. Hardy annuals may be sown in the ground in March without fear of bad results, but there are some beautiful half-hardy plants which can be safely sown in the open air (without the assistance of a hot-bed) provided the conditions of soil and atmosphere are favourable. These should not be attempted before May, and the thermometer (without which no gardener should be) carefully consulted at sunset, as when it falls the young seedlings must be protected at night. But if this trying spring-time be safely tided over, then summer will bring its glorious wealth of sunshine, and the plants will flourish in all their beauty.

In July and August, during ordinary hot weather, the gardener's chief care must be in the watering of the beds. The best time for this operation is the end of the evening, unless it can be accomplished very early in the morning, before the sun's rays become too powerful.

The water should be given through a "rose" at the end of the watering-pot, and in sufficient quantity to soak thoroughly down into the earth, as mere surface watering does more harm than good. Now is the time for taking cuttings, and all plants which grow very rapidly should be neatly stalked.

Then comes autumn, which is a very busy time. The days shorten perceptibly, and the mornings and evenings are often chilly. Protection should therefore be given to half-hardy shrubs, such as myrtles and fuchsias, to prevent the ill effects of a sudden change in the weather. This is the great time for making such alterations as may be thought desirable, and the transplanting of shrubs should now be undertaken. Keep the beds as neat as possible by plucking off dead leaves and picking up all those that fall naturally by themselves. A garden, with proper attention, may be kept to look gay even until November. Then when the first frosts come, and the last bloom is over, all the dead summer plants should be taken away, and, as the progress of vegetation is now arrested, shrubs and trees should be pruned, a process, like transplanting, which would prove very injurious were the sap still rising. Roses may be planted or moved any time up to Christmas on favourable days. This also is the period for digging and mulching. The ground should be well turned over and exposed to the air; then re-invigorated by digging in leaf-mould, and a mulching of rotten manure laid over the top, round the roots of the rose-trees and other plants that are allowed to remain always in the ground. This mulching protects the roots from frost, and nourishes them all through the winter by means of the rain which soaks through it, carrying with it the nutritive elements of the manure.

Lastly comes winter, forbidding much out-of-door work, and the short gloomy days make one long so earnestly for the first return of the sunshine which will encourage the snowdrops and crocuses to show their little green noses above the ground. In such a frost as in last January of course it is hopeless to attempt to keep anything in the beds, and most perennials which are ordinarily left out all the winter should be lifted, potted, and placed under shelter in a cool frame or outhouse. Thus each season brings its own cares and duties, its hopes and fears—the latter consequent on the ever-changing temperature, about which, by-the-bye, one little word. Do not grumble too much at the weather; it is the gardener's best friend. The rain may spoil your day's pleasure, but recollect that it refreshes and fertilises the earth. The frost may bring chilblains to your fingers, but it kills the thousands of worms and slugs which are always ready to eat up the roots of your flowers. The winter gives the plants a period of rest, and enables them to burst forth into life again with re-

newed vigour. In the Scilly Islands, where the mean monthly temperature is unusually high (45 deg. to 63 deg.), vegetation is always going on, and no fruit will ripen thoroughly. Geraniums and fuchsias grow to an enormous size in the open air, but at the expense of the flower-blooms; cold is, therefore, as useful as heat. You must stock your garden with those plants which will best flourish in that part of the country in which you happen to live. In the North of England and Midland Counties all tender climbers (tea roses, lemon-scented verbena, passion-flower, &c.) must be exposed on a south wall, and matted up carefully by the end of September. In the South of England much less care is required; indeed, in the Isle of Wight in ordinary winters we take no precautions beyond a good mulching at the roots, as protection, and very rarely lose any of our treasures. Plants in a state of repose are simply withered by the frost, and after a thaw recover themselves again. At first the frost only affects the surface of the ground, but if of long duration it gradually penetrates to the depth of from six inches to a foot, which is the maximum of cold in England. Below the part affected the ground retains its ordinary warmth (48 deg. to 58 deg.), varying very little during the whole year. When snow covers the ground the plants are protected from frost, but when the snow begins to melt the snow-water should be suffered to run off as quickly as possible, as nothing is more chilling to plants than melting or melted snow, the reason being that snow, in melting, parts with its cold, and the water that flows from it is colder than the snow itself. Therefore, hasten the snow away from your beds when, after a heavy fall, the thaw commences. Spring frosts, after a mild winter, are more fatal than any other kind of cold, as they attack the plant when the sap is rising.

After climate comes the consideration of soil, a knowledge of which is most important to the amateur gardener.

Garden soil usually consists of loam of some kind, the consequence of long cultivation. Loam is the result of the admixture and decay of various earths, and is extremely productive. It is the best of all soils as a rule, for it contains a little of everything. Plants, in order to flourish, must derive from the soil certain proportions of silica, salt, lime, phosphates, alkalies, &c., and we can to a certain extent provide the plant with its nourishment by digging and manuring the ground. If your garden soil is good and deep, it may be freely trenched and dug up, as this process favours the deep rooting of your plants. But, if the top soil is shallow, you must be careful how you bring up the subsoil from beneath it, as this is crude material, and may be totally unfitted for planting or sowing. If you have a clayey garden to deal with, you must add farmyard manure and an occasional application of lime. If your soil is chalky apply stable manure, and now and then add some old mud from a pond, which is very beneficial. This soil should not be dug up until softened by rain. Sandy soils are rather hopeless, as their absorbing power is very great. A free application of Peruvian guano is most suitable in such cases. You will now see how necessary it is to understand thoroughly the nature of your ground, and to know what will best improve it. Such knowledge will also guide you in the sowing of your annuals, and in time, after repeated failures perhaps, you will learn the nature and character of your garden, and discover what will succeed and what will not. It is not every plant that will grow in every garden. Mignonette, for instance, is very capricious, and will not tolerate any heavy damp soil. In dry earths it will grow like a weed. Lime, again, in the soil will destroy rhododendrons and other American plants, which require a rich peaty substance



wherein to grow. Many have bought their knowledge by sad experience; but in all cases forewarned is forearmed, and if the climate under which you live and the ground you have to deal with be carefully regarded and consulted, much time and patience may be saved in the culture of flowers. Plants, like animals, require food for their nourishment, and, being unable to move about in search of it, stretch out their roots into the soil for the purpose. Their health and vigour depend upon a full and unfailing supply of the particular foods on which they subsist. These foods are conveyed to them in a liquid state by the aid of water, are sucked up by the roots through the earth, and are carried up to the leaves in the form of sap. But do not err on the side of over-feeding, which is quite as harmful as neglect. If, through an excess of zeal, too much liquid manure is supplied, the plants will be gorged with undigested sap, and bloated leaves will be the result, so nearly allied are the functions of the animal and vegetable kingdom. And it is not only by the roots that plant life is sustained; the leaves play an important part in supplying nourishment. Plants grow by the absorption of water and the fixation of carbon. This latter process is performed by the foliage. Never therefore pluck the leaves from a plant, with the idea that it has got more than can be nourished by the roots, for the leaves are its supports. The nutritious fluid of the plant, like the blood of animals, needs exposure to the air before it is assimilated in the body, and this contact with the air is brought about in the leaf. The green colour of a leaf is owing to the powerful effect of light upon it, so that plants raised in the dark become of a sickly white. Vegetable life is an inexhaustible study, and a little knowledge of its workings is necessary to everyone who possesses flowers, be they in gardens or in rooms.

The following is a list of some useful annuals which will generally succeed in any ordinary garden soil. They are divided into hardy and half-hardy kinds. The hardy ones may be sown in the ground any time during the first fortnight in April, according to the season. Those that are half hardy should not be put into the ground before the middle of May, or even later, if the season is backward. In all cases the seeds should be sown on a carefully-prepared surface from which all large stones have been removed. Sow thinly, and cover with a very thin coat of fine dry earth. If the weather be dry at the time of sowing the ground should be well watered beforehand, after which no further watering will be necessary. The mode of sowing is to make small circles, according to the size of the border, scattering the seeds evenly and not too thickly. An excellent way of protecting the seedlings of annuals is to invert over the small circles where they have been sown flower-pots of proportional size. These may be raised above the soil by means of bits of brick or wood to the height of an inch or more to admit air. In case of severe weather they may be placed down on the surface and the hole covered up. As the plants come up occasional light waterings with a fine-rosed pot should be given, provided that the weather be dry and not very cold nor bleak. The evening is the best time for watering in mild weather; the morning when there is a frost during the night, and the water should be slightly tepid.

1. *Hardy Annuals for April Sowing.*

- Calandrinia speciosa (magenta).*
- Campanula Lorei (light purple).*
- Candytuft (Tom Thumb) (white).*
- Clarkia (rosea and alba) (pink and white).*
- Dianthus Heddewigii (crimson).*
- Erysimum Peroffskianum (orange).*
- Eschscholtzia crocea (orange).*
- Godetia (Lady Albemarle) (crimson).*

- Helianthus (the sunflower) (orange).*
- Larkspur (dwarf double German) (various).*
- Mignonette.*
- Nasturtium (Tom Thumb) (scarlet).*
- Nemophila insignis (blue).*
- Sweet Peas (various).*
- Prince's Feather (Red).*
- Saponaria calabrica (pink).*
- Virginian Stock (various).*

For the guidance of the amateur the colour of each plant is indicated in italics.

C. D.

THAT AGGRAVATING SCHOOL GIRL.

By the Author of "Wild Kathleen."

CHAPTER XXVIII.

"So unselfish," Helen had been called from babyhood upwards by nurses, friends, and acquaintances, and even by her father and mother.

"So unselfish," Miss Nellie had hitherto thought herself, because she was gifted with an open-handed generosity and keen sympathies. She was slowly, painfully beginning to learn from Josephine what a far more wide and wonderful thing unselfishness is than she had ever imagined, and how utterly impossible of acquirement without the help of One with whom all things are possible.

The three companions had been silent for some time, each engaged with her own thoughts, when Helen murmured, with scarcely moving lips—

"I am worrying myself so much about little Harry. I try not, but I cannot help it. Would it be giving you a great deal of trouble to let me send an answer-paid telegram to Miss Rowe to ask how he is this afternoon?"

It need scarcely be said that the petition was granted, although with some fear on Miss Crofton's part lest the news should be bad. Helen dictated the message herself.

"Please let us know how he is. Don't trouble yourself to send more than a word."

Her excitement grew so painfully intense before the answer came that Josephine found even her soothing influence wasted. Indeed, poor Helen could scarcely bear to be spoken to. At last she burst into tears, and said piteously—

"Oh, Josie dear, don't be vexed with me, but please leave off attending to me, and just pray for me, that Miss Rowe's little brother may live. It seems to be all self again even now, you see, but I cannot help it to-day. My head won't let me forget myself."

And after that outburst she said nothing more until Miss Crofton came to her with the open return telegram:—"Slight improvement again. Doctor bids us not despair. Grateful thanks for the inquiry."

This second improvement in the little boy's condition was happily permanent, and from that day he began to amend far more rapidly than before the alarming relapse. But the comfort Helen Edison derived from the answer to her telegram was all she was capable of

receiving on that score for many days. The blow on her head proved to be of a far more serious character than had been at first supposed, and when she woke up to consciousness at the end of some days she found her mother installed as nurse at her bedside, and little Rose seated, quiet as a little mouse, on a footstool at her mother's feet, knitting. The pair looked so still, so calm, so grave, that it was quite restful to watch them. But they little knew there was a pair of wide open eyes gazing at them while they bent so diligently over their work. They were finely startled at last.

"Let's have a game with your wool ball, Rosie, before it's all used," said a weak, thin little voice, followed by a weak, thin little laugh, which was repeated at sight of the commotion the simple speech had caused.

The next minute Rose had been gently banished from the room to fly wildly all over the house, even into the kitchens, proclaiming the joyful news that "Helen was well again."

"What!" exclaimed Milly Wilmot, between tears and laughter, "well again all with one jump?"

"Well, getting well," corrected Rose. "But it's all the same, for I heard the doctor tell her mamma that once she took a turn she would be all right in no time, and she has taken a turn now, for she wanted to have a game with my ball of knitting-wool; so you see—"

And whatever Milly might think, her little schoolfellow ran off with the decided conviction that she had come off conqueror in that matter. Meanwhile Mrs. Edison held her child clasped closely in her arms, while she murmured fervently, "Thank God for sparing me my child!"

"And thank God, mamma," whispered Helen, "that He has spared me that I may learn to grow like Josephine."

"Or, as I suppose Josephine herself would say," said Mrs. Edison gently, "to grow to be like her Pattern?"

"Yes, mamma."

Mrs. Edison let her talk no more then, but laid her back on her pillows, gave her some beef-tea, and bade her go to sleep again. She obeyed the injunction so well that morning had faded into afternoon, afternoon into evening, before she again opened her eyes to look round the room. Her only companion now was Josephine, who was instantly beside her when she found that she was awake.

"Have you slept comfortably, Nellie, dear?" she asked, as she stroked the little white hand which had grown so very thin during the past fortnight.

For a few moments there was no answer. Then a sigh came, and Josephine asked more anxiously, "Were you in pain again?"

"No, not in pain," was the quiet reply. "I think I must have slept a long time, very soundly indeed. But for the past hour or more, as it seems to me, I have been dreaming, and dreaming the same thing over and over again, till it got quite terrible, and I felt I would give anything to be able to say the words aloud, to get rid of the sort of muffled sound of threatening in them."