

WINDOW-GARDENING.

BY A PRACTICAL MAN.

WINDOW-GARDENING, the subject of the present paper, is one which has of late years engrossed a great deal of attention, and reasonably so, for it is a recreation which comes within the reach of all. Many a dreary chamber has been made cheerful and pretty by the introduction of flowers and climbing plants; and the sickly patient, who cannot get out either into the garden, or taste the sweet refreshing air of even the parks of London, may sit for hours enjoying the pretty flowers and foliage that beautify his chamber window. As there are many ways and means of making this miniature garden, a few remarks and hints may prove acceptable.

The success, growth, and beauty of the flowers will depend much on the aspect of the window, for while one which faces south or south-west will conduce much to a prosperous state of things, that in an opposite position will make growth and bloom more difficult. But there are flowers so hardy that the absence of sun, and even exposure to cold winds, will make little difference to them. I will now endeavour to instruct my readers how to proceed with the foundation for the garden.

First buy at some timber-yard or carpenter's as much planking as will be necessary for the box, the wood for which should not be less than an inch thick. If you are not skilful enough to make it, any carpenter would construct one very cheaply. Having made your box, which should in making be ten or twelve inches wide from the edge of the window, paint or pitch it well on the inside, to preserve the wood from rotting, and then make about twelve holes in the bottom, large enough to put a common pencil through. These holes are for the purpose of draining the water off, as nothing is so injurious to the growth of plants as allowing water to remain at the bottom either of boxes or pots. When the box is so far done, it becomes important to make it sightly on the outside. There are many ways of doing this, and all so simple that any will suffice; but I may suggest one plan. Go to any large establishment where they sell floor-cloth. They generally have a number of remnants that resemble painted tiles. Having measured the quantity as to the height and width of your box, select any pattern agreeable to your taste. Cut the floor-cloth into a long strip, and with

small tacks fasten it on all round. Next put a fillet or small piece of wood on the top of the edge of the box, to prevent the rain or water from getting behind the cloth; then give the whole two coats of copal, or light-coloured varnish, and you will be surprised at the excellence of your own workmanship.

As I am writing on the subject, I may mention how some very pretty and useful window-boxes may be made of virgin cork. First, form a rude box with ordinary deal wood to the size and shape required, and cut the cork into strips or lengths; and after fitting them carefully together, nail them firmly on the wood—at the bottom with French nails (which are the best for the purpose), and then with copper wire fasten the pieces together at the top. Any unevenness rather adds to the desired rustic effect.

The next thing to be done is to form a net-work all round the window for the climbing plants to fix their tendrils to or grow amongst. This may be managed by purchasing at the ironmonger's as much of the small galvanised iron netting as will go round it, or by putting in a number of nails at regular distances, and lacing common copper-wire diagonally; or strong string will form a very good support for the plants.

I have now, I think, given the simplest and easiest means for making what will appear a very nice box, and will imitate those costly ones that are faced with earthen tiles. We will next furnish our little garden.

Before putting in the mould it is advisable to lay

down some cinders or broken bits of flower-pots to drain off the water. Some plants flourish better by having the cinders to let their roots wander amongst. Now for the mould. Good potting mould is best, or else garden mould with sand, and a little manure mixed with it.

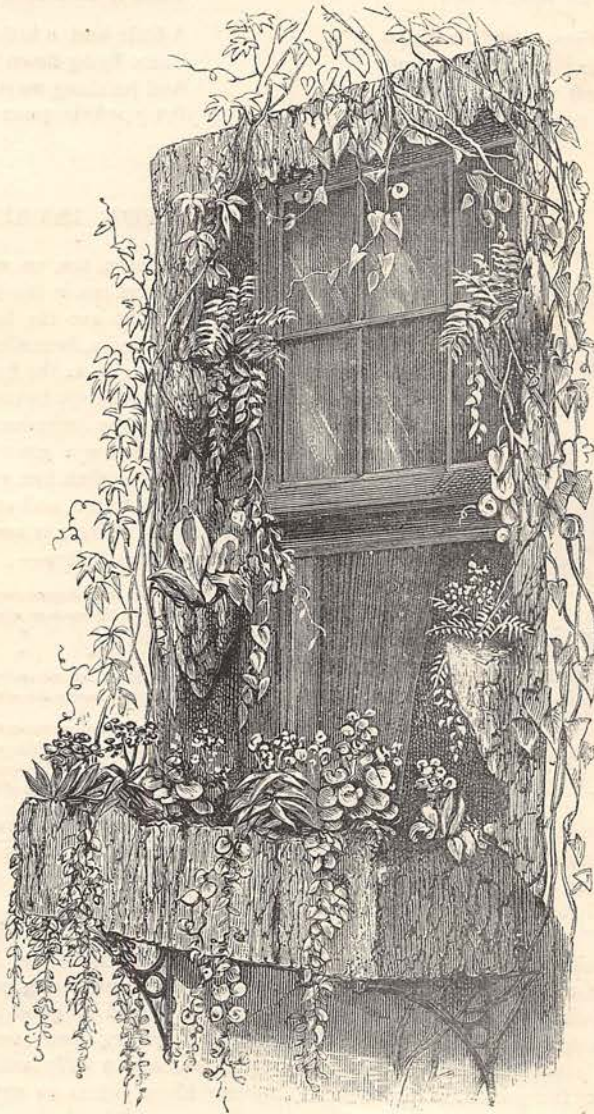
I will now speak of those plants which are to climb and form by their hanging branches and leaves that framework of green which from the inside looks so refreshing and pretty. The common Virginia creeper, so hardy and free-growing in its character, I would recommend particularly to those who live in or about large towns; also ivy, for though the former is preferable for its beautiful green, the latter lives through the winter, and the first trouble is the end of it. The common nasturtium, scarlet-runner, passion-flower, wild clematis, jessamine, &c., will also do well. As each month comes, some fresh plants may be introduced.

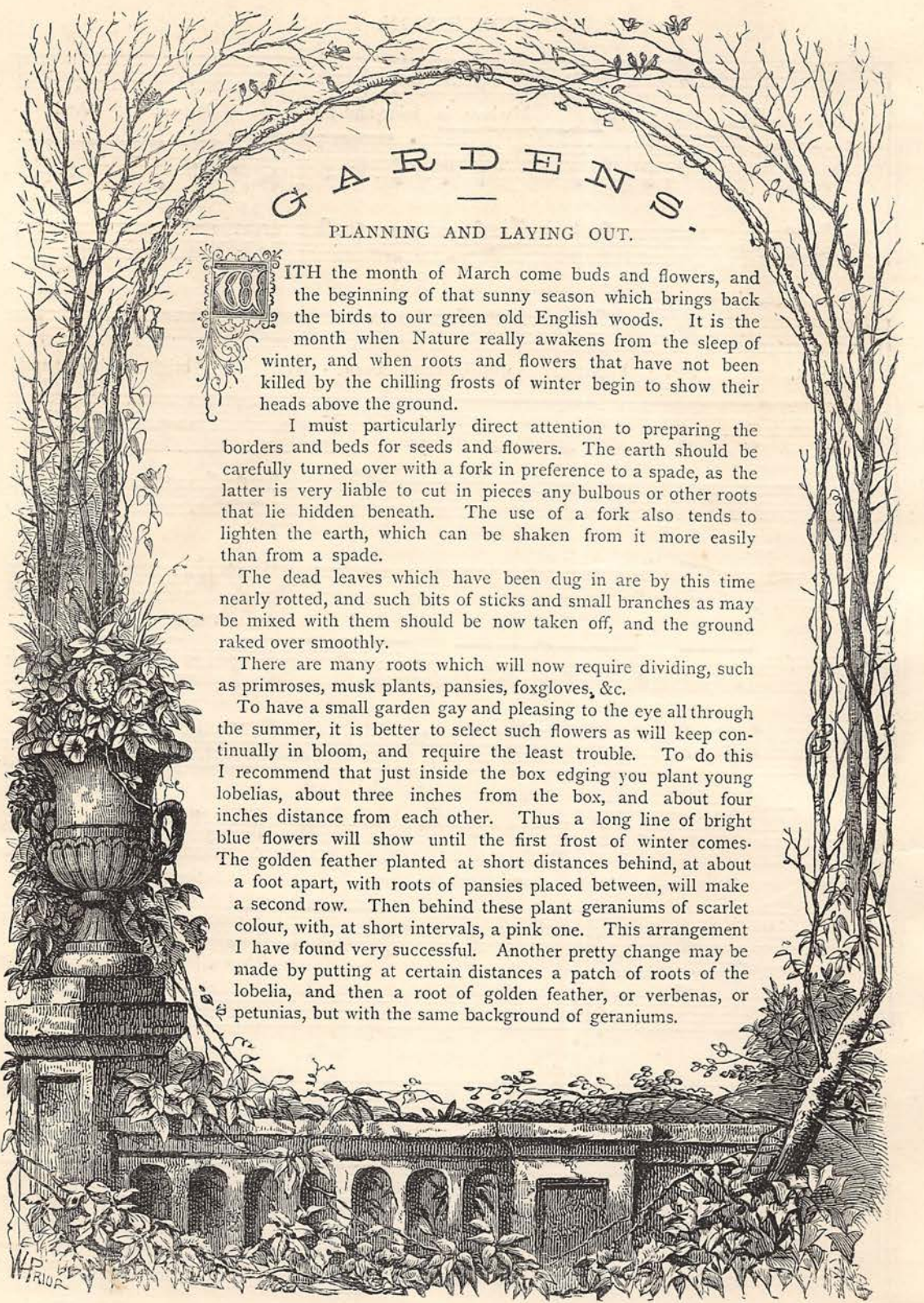
The introduction of virgin cork into this country has afforded a very excellent material for decorative purposes in the garden; and the box for the window, as also the sides of the window, can be covered with it.

If the cork is to be used, a thin plank must be fixed round the outside of the window, and the cork cut into pieces and nailed on it, and then varnished with oak varnish. The cork can be fixed on the box in the same manner.

During this month digging and manuring should be done; and daisies, pansies, anemones, and wallflowers planted.

W. H. P.





GARDENS.
—
PLANNING AND LAYING OUT.

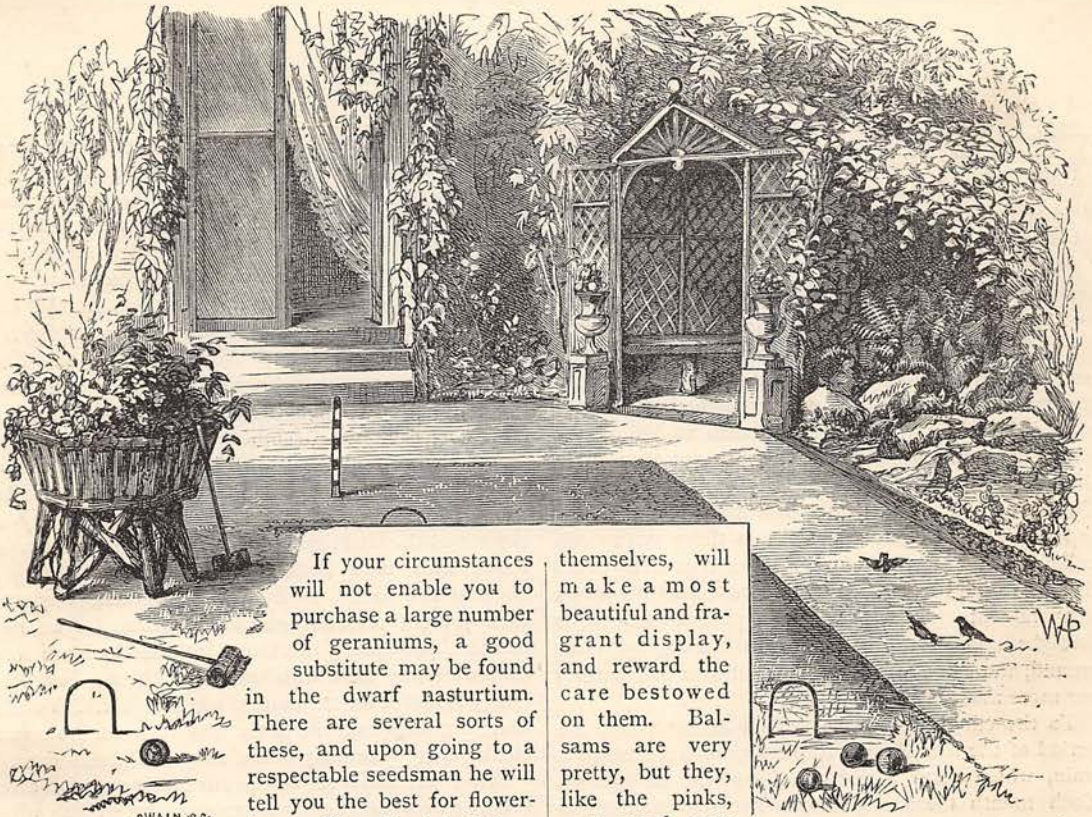
WITH the month of March come buds and flowers, and the beginning of that sunny season which brings back the birds to our green old English woods. It is the month when Nature really awakens from the sleep of winter, and when roots and flowers that have not been killed by the chilling frosts of winter begin to show their heads above the ground.

I must particularly direct attention to preparing the borders and beds for seeds and flowers. The earth should be carefully turned over with a fork in preference to a spade, as the latter is very liable to cut in pieces any bulbous or other roots that lie hidden beneath. The use of a fork also tends to lighten the earth, which can be shaken from it more easily than from a spade.

The dead leaves which have been dug in are by this time nearly rotted, and such bits of sticks and small branches as may be mixed with them should be now taken off, and the ground raked over smoothly.

There are many roots which will now require dividing, such as primroses, musk plants, pansies, foxgloves, &c.

To have a small garden gay and pleasing to the eye all through the summer, it is better to select such flowers as will keep continually in bloom, and require the least trouble. To do this I recommend that just inside the box edging you plant young lobelias, about three inches from the box, and about four inches distance from each other. Thus a long line of bright blue flowers will show until the first frost of winter comes. The golden feather planted at short distances behind, at about a foot apart, with roots of pansies placed between, will make a second row. Then behind these plant geraniums of scarlet colour, with, at short intervals, a pink one. This arrangement I have found very successful. Another pretty change may be made by putting at certain distances a patch of roots of the lobelia, and then a root of golden feather, or verbenas, or petunias, but with the same background of geraniums.



If your circumstances will not enable you to purchase a large number of geraniums, a good substitute may be found in the dwarf nasturtium. There are several sorts of these, and upon going to a respectable seedsman he will tell you the best for flowering. The Crystal Palace

Gem is a charming variety, and blossoms freely. As a background to these the old-fashioned Canterbury bell, sweet-william, snapdragon, foxglove, &c., with patches of sweet-peas, may be arranged alternately, care being taken to preserve a contrast of colour. The deep orange scolochia may be sown alternately with the dwarf nasturtiums. The best plan, I think, is to sow the nasturtium seed plentifully in the places they are to occupy: if too many come up together, thin them out, as four or five roots are sufficient—a greater number would prevent their spreading. To obtain a supply of lobelia and golden feather, sow the seeds in pots or shallow pans, as directed in a former article. Those which have already been sown and have sprung up may now be pricked and put three or four in a pot; and when about two inches high they should be placed where they are to flower, about the beginning of May.

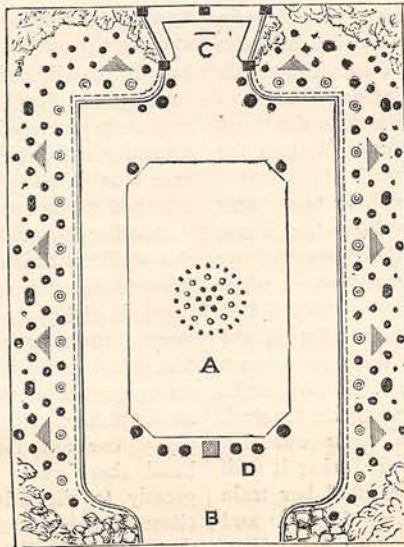
The great variety of pinks and carnations, quite a study in

themselves, will make a most beautiful and fragrant display, and reward the care bestowed on them. Balsams are very pretty, but they, like the pinks, want much care

to bring them to perfection; and my only reason for suggesting the former systems of arrangement is that any one may be sure of a success, and have a garden

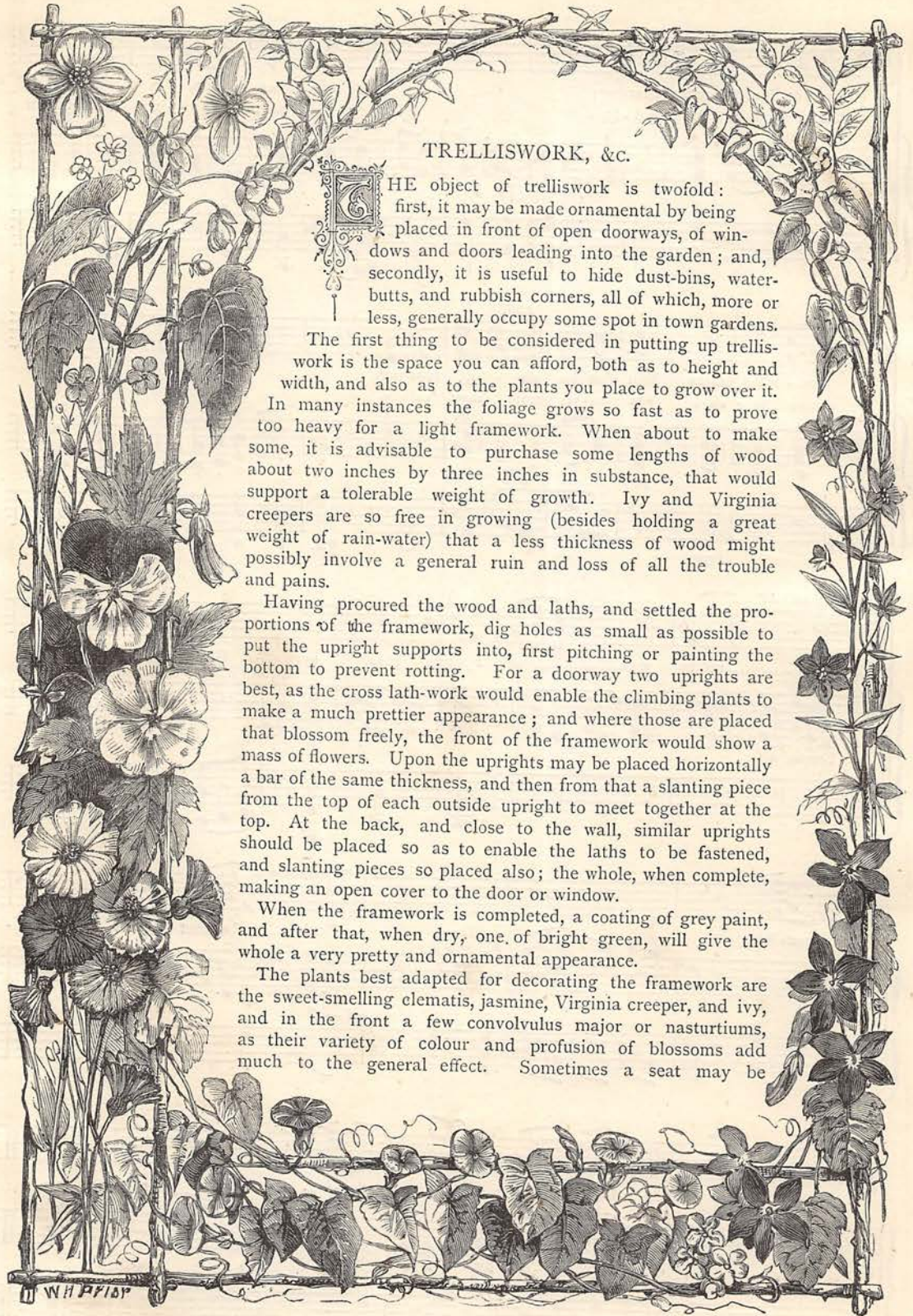
looking pretty until the end of autumn. If there are beds on the grass plots, a whole one may be devoted to any one particular plant, with an edging of serastium, golden feather, or lobelia, the middle filled up with some plants, the flowers of which present a decided contrast to the edging. Calceolaria is a most useful plant, as it keeps in bloom all the summer, and with its bright yellow always looks cheerful. This placed in front, or mixed with the scarlet geraniums, makes a good show. It is very important, when planting geraniums, to know the height they grow, as it would never answer to place those which grow tall in front.

Sow now nasturtiums and convolvulus major for climbing (directions for training will be given in my next article), roll grass, keep clear from moss and weed gravel paths. W. H. P.



PLAN OF GARDEN.

- A. Grass Plot, with Bed in centre.
- B. Walk.
- C. Summer-house.
- D. Flowers in pots.



TRELLISWORK, &c.

THE object of trelliswork is twofold: first, it may be made ornamental by being placed in front of open doorways, of windows and doors leading into the garden; and, secondly, it is useful to hide dust-bins, water-butts, and rubbish corners, all of which, more or less, generally occupy some spot in town gardens.

The first thing to be considered in putting up trelliswork is the space you can afford, both as to height and width, and also as to the plants you place to grow over it.

In many instances the foliage grows so fast as to prove too heavy for a light framework. When about to make some, it is advisable to purchase some lengths of wood about two inches by three inches in substance, that would support a tolerable weight of growth. Ivy and Virginia creepers are so free in growing (besides holding a great weight of rain-water) that a less thickness of wood might possibly involve a general ruin and loss of all the trouble and pains.

Having procured the wood and laths, and settled the proportions of the framework, dig holes as small as possible to put the upright supports into, first pitching or painting the bottom to prevent rotting. For a doorway two uprights are best, as the cross lath-work would enable the climbing plants to make a much prettier appearance; and where those are placed that blossom freely, the front of the framework would show a mass of flowers. Upon the uprights may be placed horizontally a bar of the same thickness, and then from that a slanting piece from the top of each outside upright to meet together at the top. At the back, and close to the wall, similar uprights should be placed so as to enable the laths to be fastened, and slanting pieces so placed also; the whole, when complete, making an open cover to the door or window.

When the framework is completed, a coating of grey paint, and after that, when dry, one of bright green, will give the whole a very pretty and ornamental appearance.

The plants best adapted for decorating the framework are the sweet-smelling clematis, jasmine, Virginia creeper, and ivy, and in the front a few convolvulus major or nasturtiums, as their variety of colour and profusion of blossoms add much to the general effect. Sometimes a seat may be

placed
inside the frame-
work, care being of course
taken to put good supports under
the seat, otherwise the whole affair might be
brought down.

Much, as I have said, can be done in this way for the
ugly corners of the garden, where such a framework could be
erected, and made to hide a dust-bin or water-butt, or indeed
any other objectionable spot in the sometimes limited space of our
suburban gardens.

With this month comes much work to be done, as Nature is now putting
forth all her strength to bring into active growth those plants and roots which
have survived the winter.

All geraniums that are now beginning to show their little spring shoots
must be taken out of their pots and the old earth partly shaken from the
roots, and the larger and old roots cut off. The plants may then be replaced
in the pot with new and fresh mould. A little manure or old leaf-mould
which has rotted in the garden during the winter, and some silver sand, will
be best. Before putting the geraniums into the pots, tiles or cinders must be
placed at the bottom to drain the earth.

Before concluding this article, I must say a few words upon laying
out a small lawn or grass plot with beds. Some little difficulty might
arise as to the best way of doing so. Before cutting out the beds, the
centre of the plot must be found; this may be done by putting a small stick
at each of the four corners (that is, presuming your grass plot is either
square or oblong) and then tying a string to the sticks, and crossing it in the
centre. The point where the cords intersect will be the middle; if you
wish for a circular bed, put a strong piece of wood where the string crosses,
and with another piece of cord fastened to it, a circle can be struck off any
size you require; then with a sharp knife or turfing-iron cut the grass as
the string goes round, or put small pieces of firewood close together to
mark the shape; it is better to shape out the bed by means of pieces of
stick, or by taking a piece of whitening or chalk and drawing the shape on
the grass. When once the bed is made, great cleanliness of the sides,
and keeping the mould away from the surface of the grass, will conduce
much to the effect. For flowers I should advise golden feather, lobelia,
sedums, pansies, and geraniums, according to taste; always having due
regard to contrast of colour and height of plants.

Other pretty designs for flower-beds will easily suggest themselves
to the reader. The sycamore or ivy leaf, or the fleur-de-lys, would
not be found very difficult to
plan out upon the principles
already laid down, and
perhaps on the whole
these patterns are
more agreeable to
the eye than the
formal circle—
in such matters,
however, I pre-
fer leaving my
readers to follow
out their indi-
vidual tastes.

W. H. P.



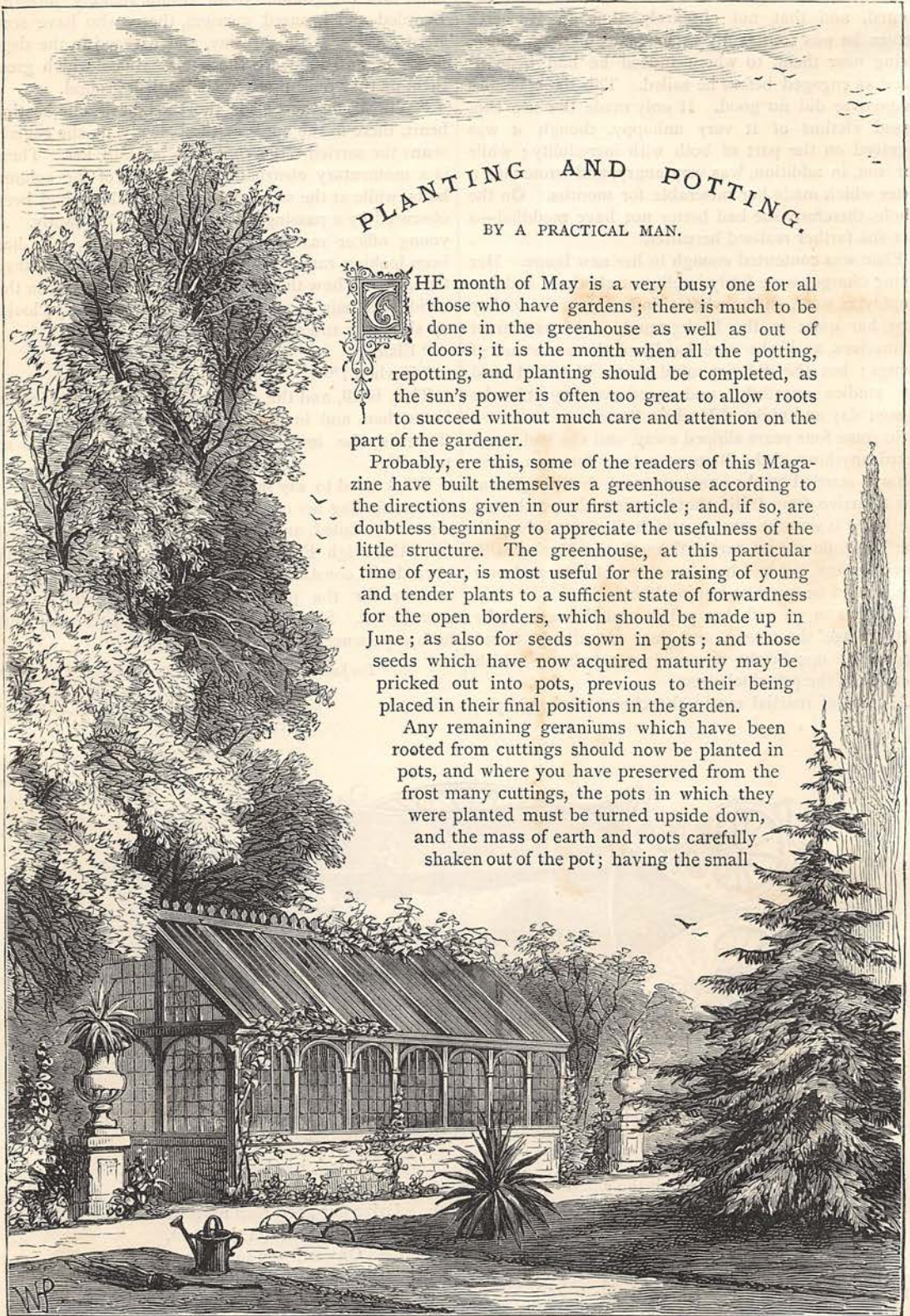
PLANTING AND POTTING.

BY A PRACTICAL MAN.

THE month of May is a very busy one for all those who have gardens; there is much to be done in the greenhouse as well as out of doors; it is the month when all the potting, repotting, and planting should be completed, as the sun's power is often too great to allow roots to succeed without much care and attention on the part of the gardener.

Probably, ere this, some of the readers of this Magazine have built themselves a greenhouse according to the directions given in our first article; and, if so, are doubtless beginning to appreciate the usefulness of the little structure. The greenhouse, at this particular time of year, is most useful for the raising of young and tender plants to a sufficient state of forwardness for the open borders, which should be made up in June; as also for seeds sown in pots; and those seeds which have now acquired maturity may be pricked out into pots, previous to their being placed in their final positions in the garden.

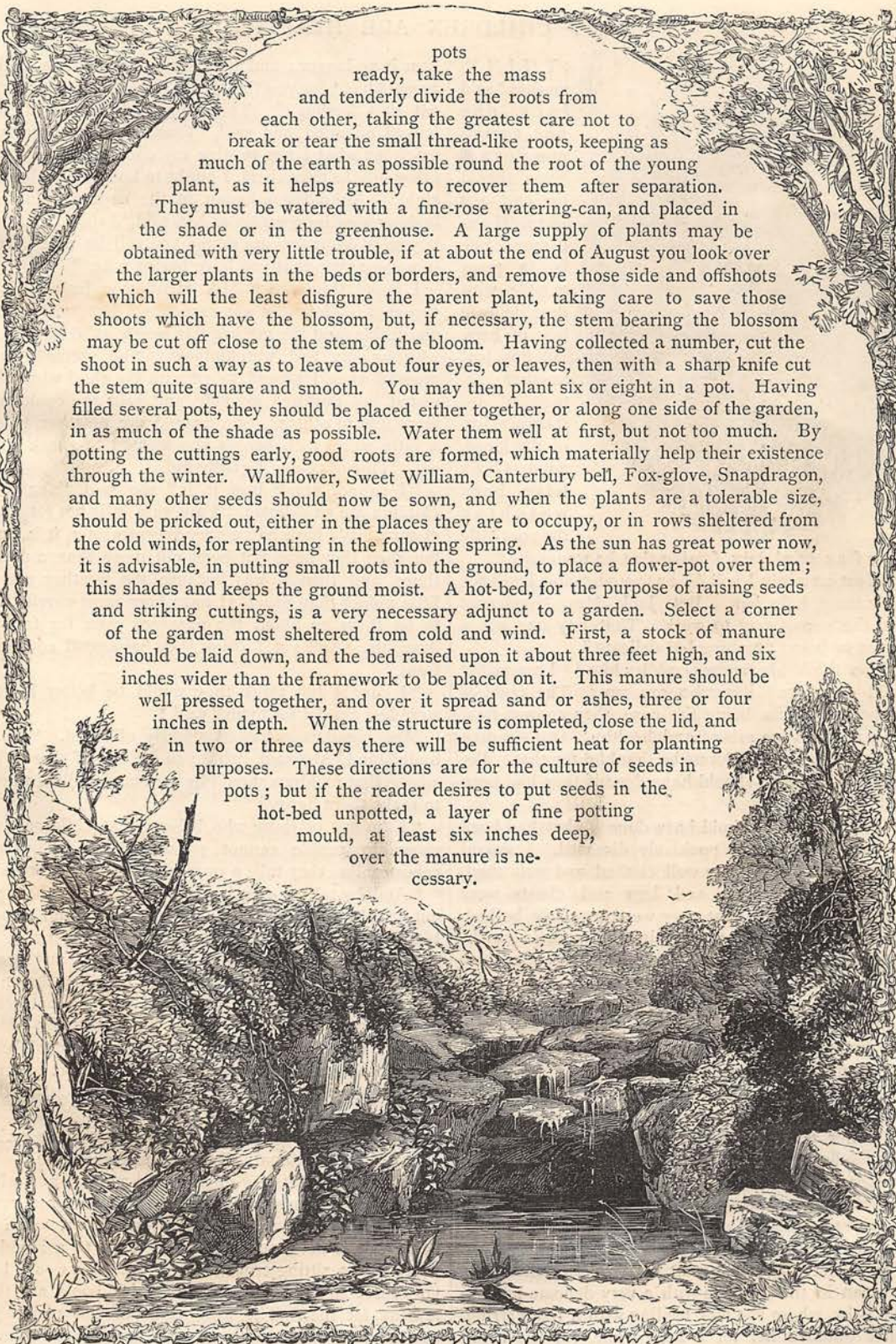
Any remaining geraniums which have been rooted from cuttings should now be planted in pots, and where you have preserved from the frost many cuttings, the pots in which they were planted must be turned upside down, and the mass of earth and roots carefully shaken out of the pot; having the small



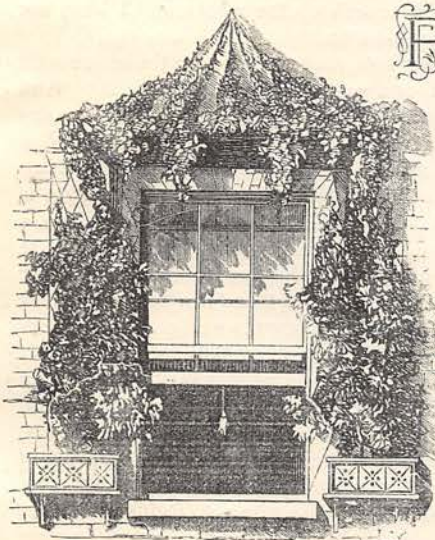
pots

ready, take the mass
and tenderly divide the roots from
each other, taking the greatest care not to
break or tear the small thread-like roots, keeping as
much of the earth as possible round the root of the young
plant, as it helps greatly to recover them after separation.

They must be watered with a fine-rose watering-can, and placed in the shade or in the greenhouse. A large supply of plants may be obtained with very little trouble, if at about the end of August you look over the larger plants in the beds or borders, and remove those side and offshoots which will the least disfigure the parent plant, taking care to save those shoots which have the blossom, but, if necessary, the stem bearing the blossom may be cut off close to the stem of the bloom. Having collected a number, cut the shoot in such a way as to leave about four eyes, or leaves, then with a sharp knife cut the stem quite square and smooth. You may then plant six or eight in a pot. Having filled several pots, they should be placed either together, or along one side of the garden, in as much of the shade as possible. Water them well at first, but not too much. By potting the cuttings early, good roots are formed, which materially help their existence through the winter. Wallflower, Sweet William, Canterbury bell, Fox-glove, Snapdragon, and many other seeds should now be sown, and when the plants are a tolerable size, should be pricked out, either in the places they are to occupy, or in rows sheltered from the cold winds, for replanting in the following spring. As the sun has great power now, it is advisable, in putting small roots into the ground, to place a flower-pot over them; this shades and keeps the ground moist. A hot-bed, for the purpose of raising seeds and striking cuttings, is a very necessary adjunct to a garden. Select a corner of the garden most sheltered from cold and wind. First, a stock of manure should be laid down, and the bed raised upon it about three feet high, and six inches wider than the framework to be placed on it. This manure should be well pressed together, and over it spread sand or ashes, three or four inches in depth. When the structure is completed, close the lid, and in two or three days there will be sufficient heat for planting purposes. These directions are for the culture of seeds in pots; but if the reader desires to put seeds in the hot-bed unpotted, a layer of fine potting mould, at least six inches deep, over the manure is necessary.



GARDENING IN JUNE.



PERHAPS there is no subject on which it is so easy to grow eloquent, or to break out all at once in the poetical, as that suggested by the beauties of nature. Regard them in whatever

light we please, they never fail to give us infinite satisfaction and delight; to the gay flowers of the field we have recourse for pleasure—ay, and for consolation—from the cradle to the very grave. Among the first things that a tiny baby does, so soon as it is capable of observation and mischief, is to carefully dissect, with chubby fists and wondrous gaze, the petals of a rose that the eager mother has just thrust into its grasp, with an “Oh! pretty, pretty!” The school feast, even of St. Giles or St. Pancras, would hardly be called complete without some posies; it is the little “forget-me-not” that the maiden, with coy blushes, early puts into her lover’s hand, and it is the orange blossom that afterwards encircles her brow; and, oh! it is flowers—flowers that, with bursting hearts and wringing hands, we cast as the last fond tokens of our affection upon the oaken covering of our dear dead. One step further—if we may be allowed to tread on yet more hallowed ground—was it not from the lilies of the field, and the whitening wave of the promised grain, that the Divine Master gave us some of his choicest lessons, and with

the palm-leaves that His followers carpeted His road?

“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;
And with child-like, credulous affection,
We behold their tender buds expand;
Emblems of our own great resurrection—
Emblems of the bright and better land.”

But it is the month of June; everything is coming on with a rush, and we must hurry out—first into the flower garden. The bedding out which we began last month should be completed as soon as possible. Let us hope this was not commenced too early in May, in this variable climate of ours, for we must not forget that it is not so long since the Derby was run in a snow-storm. It will, of course, be necessary now to take up all tulips, hyacinth bulbs, &c., which are in the way before we can proceed with the bedding out. In doing this great care should be taken not to destroy the foliage; don’t forget that it is the leaves which nourish a plant; have you not, for instance, remarked that when that miserable little green caterpillar attacks our currant and gooseberry trees, stripping them of their leaves, the fruit never comes to perfection? I once heard of a young gardening tyro who, in his impatience to push on with bedding out, deliberately cut off, *in toto*, all the foliage of the tulips that came in his way, leaving the bulbs in the earth, vainly hoping that they would blow again in the following spring, but thereby destroying a remarkably fine show that he had had. All bulbs, then, should be taken up and set aside for drying, and a little fresh manure would then do the beds no harm. To those who are rich in their stock of bedding-out plants, let us next say a word about over-crowding. Recollect that in a couple of months’ time, or thereabouts, most of the plants you are now putting in will, perhaps, have doubled themselves

in size. It is very unnecessary, wasteful, and unsightly to have a garden in the month of August a perfectly overgrown forest of geraniums, petunias, calceolaria, phlox and lobelia, and many of the smaller and perhaps the better of your plants completely



choked and concealed by the larger and stronger ones. Strive also, as far as you can, to have a uniformity of height in your bedding plants; it will therefore be necessary to peg down some of the taller and more precocious shoots. To do this it is a good plan to have one or two long strips of matting extending across the entire length of the bed, and fastened down at each end of it, of course so arranging your matting as to keep the more obstinate of your shoots in check, and as the season advances you can well afford to stop altogether those that nevertheless persist in growing too much ahead of the others. Avoid, however, this pegging down should the weather be still bleak and cold, for there is a good deal of truth about the English summer consisting only of three hot days and a thunderstorm, and the time for thunderstorms has hardly come yet. Our reason for this caution about pegging down is at once apparent if we reflect that a geranium, for instance, lying all along in a horizontal position, would be much more liable to be injured by the frost—which descends perpendicularly—than had it been kept, as originally, upright, when perhaps it would have hardly been damaged at all.

Now a few words about the queen of flowers—the ever-popular rose. June is, we know, the month of their luxuriance; at all events it is so as the month advances; but it is also the time when they are so provokingly tormented, especially when in full bud, by their enemy the nasty little green maggot, which so loves to feed upon the heart of the bud, or to hide itself under its web within the leaves. If you have the time for it, much can be done by looking them well over and picking them out one by one, but a good syringing is the best thing. For this I have often used a small quantity of soft soap, well mixed in a pail of water, which is, however, a very common remedy; but to this preparation no harm can be done by the addition of a dash of turpentine in the pail, though of course a *very little* indeed of this must be used. When thoroughly mixed, syringe your roses well with this, and immediately afterwards syringe them again, but with plain water. A good dosing, too, of liquid manure will greatly benefit them. It is hardly time for budding yet, but something with advantage might be said upon that head in July. Neatness is, after all, the great thing in the flower garden; painstaking of this kind will abundantly compensate you, although you may not perhaps be able to lavish much time and expense on your garden. Generally then, let us say, keep your lawn well mown; if you let it go too long uncut it will, when at length mown, look perhaps lumpy, and have more the appearance of a hay-field from which the hay has just been carted. And keep the weeds down, for we know too well, all of us, that they “grow apace;” don’t idly break them off short with your hoe, but have them up by the roots. It is tedious work, certainly, weeding gravel walks, but what garden looks in order where this is not done? I believe that destroying the weeds here with salt does as much harm as good, for the remedy is only temporary, and the salt, after a time, serves as a positive manure, and thus the remedy eventually aggravates the disease. I

once asked a good gardener, on a very hot summer’s day, why he had many parts of his gravel walks all picked up, and he told me it was to allow the heat of the sun thus to scorch up the weeds, and I have not since forgotten the hint.

But it is time, now, that we turn from the ornamental to the useful, and say something about fruit. And first of the strawberries. Should the season be a dry one, do not, nevertheless, begin watering them until it is positively necessary, as, this once done, it is often expedient to continue doing so, which in a drought is naturally a difficulty. Place round your plants, too, a little straw, or, if you cannot obtain this readily, use some of the grass from your lawn, which it would be well first of all, however, to transform into hay as far as you can, for unfortunately the wet grass has rather a tendency to attract than to repel the slugs. This is done to keep the fruit clean, as it is very mortifying to put a fine strawberry into your mouth full of dry grits of earth. Far better, however, than grass is a little tan, if you can procure it, the slugs not at all approving of this process. Remove all the runners, also, wherever they show themselves, otherwise your fruit will be poor and weak—unless, indeed, you want to rear some plants for the following year, in which case peg them down or pot them.

Thin out the wall-fruit now, always of course removing the most malformed, or those from the heaviest bunches. This will require some care, as too much violence might entail pulling off six or eight peaches or nectarines at once. Don’t let the pigs have the thinned-out fruit; why not try the experiment of a tart instead? A second thinning may be necessary as the season advances.

In the kitchen garden there is an overwhelming amount of work to be done, of which it is almost impossible to say much more here beyond a mere chronicling of the fact. Earth up potatoes where necessary; turnips, peas, broad beans, spinach, &c., may all be sown now; plant out our old and useful friend the cabbage, and prick out broccoli and Brussels sprouts some six inches apart. The great art of managing a kitchen garden well is so to husband and utilise your ground as to get one crop to follow another in succession, and when you get some land cleared to have some young plants ready to put in at once.

The vines, too, in this month—like everything else—require much attention. Trim them carefully by shortening all the branches to the first point past the bunch; pinch off too the young green shoots, which otherwise will grow ahead tremendously, and weaken your vine. On no branch should you allow more than one bunch to perfect itself, unless there be generally but a poor crop upon the entire vine. During the best time of the day give plenty of fresh air. This is, recollect, as essential for vegetable as for animal life; good ventilation is the best preventive of spider, and particularly of mildew—a terribly difficult enemy to get rid of if once your vine be attacked by it. Thin out your grapes carefully with a long and fine pair of scissors, but especially avoid touching them more than you can possibly help.

many a cold and cough. The second danger is even yet more serious; it is that of damp clothing and wet feet. Country children exercise their privilege of walking into every puddle, of putting their feet into every moist place, and of remaining out in the rain; and in this way they often contrive to get their clothes very wet. So long as they continue to run about, there

will not be much harm done; but if, after they come into the house, they are allowed to keep on damp clothing, and wet boots and socks, woe betide them! You will never get children to own that their clothes are wet, because they dislike the trouble of having to change them; but it is very necessary to insist upon the change being made. E. C



THE CULTIVATION OF ROSES.

GARDENING FOR JULY.



AS it is our wish to be eminently simple, as well as practical, we will not venture to embark on counsel to those who have every facility for high-class gardening at their disposal, but who yet, sometimes, seem to take so little interest in it. Our province, then, shall be among gardens of more

modest pretensions; and here we are, once more, at the back of the old Rectory. We have had a heavy thunderstorm in the night, and the ground is "wringing wet," but it is a fine, hot morning, cloud and only a little sunshine intermixed; one that will do very well, therefore, for our operations. And here comes Edith down the gravel walk, in simple morning attire, sunshade, and daintily-trimmed brown-holland apron, with neat little pockets all about it. She has promised to give me a lesson in budding roses—a very rose-bud herself, by the way. In her hand I see is a budding-knife—an ordinary-sized pocket one—single-bladed, but with the ivory handle tapering at one end for all the world like a juvenile paper-cutter; and, sticking out of the little apron-pockets before-mentioned, I also notice the tops of the branches—if they are big enough to deserve the name—of the roses that she is about to fasten so ingeniously to the stocks.

Shortly before Christmas, or quite late in the

autumn, is the best time to select your briars from the hedge-rows; but as this is rather a difficult, dirty, thorny, and very often an illegal operation, the better plan is to make your choice from a nursery. Three-and-sixpence or four shillings per hundred was the old-fashioned price of them in the bygone days of moderation and simplicity, but like everything else—it is impossible to say why—double that amount is now their market value. These briar-stocks should be straight, strong, and have good roots, which last, however, should be well trimmed before you plant them in your garden. Choose those that are green all the way down in preference to the darker-coloured ones: they will last the longer. If you are rich in your number of stocks, plant them in rows rather over a foot apart, leaving a space of some three feet between the rows, or sufficient room, at least, to enable you afterwards to get easily among them; and, finally, support each stock with a good strong stake.

As the spring advances, pinch off all shoots and buds that make their appearance on the lower part of your stock, watching very carefully the two or three that grow on the top, in order to see which will, as time advances, be best available for your budding operations. The great importance and constant repetition of this pinching-off process cannot be too strongly insisted upon, if you reflect that you necessarily want all the strength of the stock to be thrown into your *top* buds, and that therefore, if you allow any to remain on the lower part or at the base of your stock, all the strength will be thrown into *them*, while those on the *top*, the only ones of any use to you, will be much weakened, and may probably fail entirely. Nevertheless, if in the *first* instance, your top buds look weak and sickly, and a little lower down your stock you

notice one or two strong ones, it would be well to sacrifice the height of the stock, and with a sharp and strong knife cut it down at once to the point just above your more promising buds. Be sure, too, and cut well away from the roots those red-looking suckers that so often, after the spring has set in, make their appearance above ground, perhaps a foot or more from the base of your stock, to the well-being of which they are almost as fatal as the diminutive buds that we have been discussing. Thus much then for the stocks, and now for the budding itself.

Now, at the base of each leaf on the rose-trees from which we are about to take the small branches for our purpose, will be found a *bud*, somewhat resembling, in its earlier stages of existence, the apex of a ripe apple-pip, which after the leaf has fallen away from it becomes more apparent, and would eventually, if left on the parent tree, become a branch. This little bud it is that we are about to manipulate so carefully.

Choose, then, a branch from your tree that has on it some three or four of these buds, perhaps giving the preference to one on the top of which a rose has already blown, and on which therefore the buds might have gained strength. A still better plan is to have marked out, a week or two previously, the branches you intend to select, and then pinch off the half-blown rose from the top, thus throwing additional strength into the little buds below that you are about to use. Next, from your branch cut off a slice of the wood, of about an inch in length, beginning half an inch above the leaf where the bud is apparent, and bringing the knife out half an inch below the leaf, the bud thus being at the centre of your slice. So cut your slice as to let it taper at both ends; then, with a sharp knife, remove the inner portion of the wood—the pith, it might almost be called—still carefully avoiding the remotest injury to the bud. This little tapering slice, with the bud in its centre, we are about to insert under the bark of the branch we have allowed to grow on the tops of our stocks. And now it is of these stocks, or rather of the two branches that have grown on their tops, that we have again to speak.

Take a firm hold of your stock, and shorten both these branches with your knife to a foot at least. On the *upper* side of the branch, and within, say half an inch of its base, or even quite close to the stock, next cut a slit in the bark, upwards, and of about an inch in length, but be careful not to cut into the wood itself; let your incision be, in fact, only “skin-deep.” Across this incision make a second one—a very small one—the two, when done, resembling a capital T. Some gardeners, however, say that this *second* cut is really unnecessary, and that it tends to aggravate the wound, as well as to loosen the hold of the bark upon the inserted bud. Then, with the ivory “paper-cutter” handle of your budding-knife, gently raise up the bark on both sides.

But now for the last act. Our little, tapering slice of wood, on which is the bud, must finally be inserted under the bark, on both sides of the incision we have just made in the branch on our stock, and so inserted

as to leave the bud itself just exposed to view. Then bind the whole carefully and closely round and round with a piece of bast matting, or with a piece of ordinary worsted—of course not covering over the bud. Lately I have heard that sticking-plaster is often now used, and answers the purpose quite as well as matting, but I have never tried the experiment myself, and should have thought that a heavy or persistent rain might have been liable to wash it off. We have said at the outset that the entire process should not be attempted in very hot and dry weather. If, however, on the following morning the sun is powerful—not an uncommon thing in July, as “Old Moore’s Almanac” would say—tie a small piece of wet moss over the bud for a few days. If, in process of time, you see that the bud has “taken,” don’t rashly remove your bast matting, but keep it on, lest a gust of high wind comes with the next storm, and fatally loosens your bud from its stock.

The subject of budding roses, then, may be considered as exhausted, for all practical purposes, and it is time that we wound up with a few general remarks on other gardening operations, selecting only those which are most urgent, as far at least as our limited space will allow.

In the flower garden, attention should now be paid to those of the early autumnal blowing class, and dahlias, hollyhocks, asters, &c., carefully staked. The lawn, too, now requires constant attention, and all box edgings, evergreen hedges, &c., should be cut back, so as to present a level surface. If this be done, say about the third week in July, after the midsummer shoot is over, the process need not be repeated till the following May. But, in fact, so much must depend upon the season that it is next to impossible, in this variable climate of ours, to give directions that will hold good from year to year, except those of a most general kind. Don’t be afraid, too, of cutting flowers for table and house decoration, lest you should injure your plants. As a rule, the more freely full-blown flowers are cut, the more freely will they go on blowing; besides which, if allowed to remain on, they only tend to weaken your plant, and present very soon an unsightly appearance into the bargain. How much better, for instance, to have in your drawing-room a large china basin full of fragrant petals of the rose, than to have your standards dotted all over with bronzed and burnt-up flowers!

In the kitchen and fruit gardens there is, of course, again plenty to be done. Celery beds should now be made up; for this purpose dig a trench a foot deep, and rather over a foot in breadth, the length of your trench of course varying in accordance with the room you have to spare, and with the quantity of plants at your disposal. Put out your celery plants some six inches apart; give plenty of good liquid manure, as the richer and moister your trench is, the finer will your celery be. Pile up neatly the earth that you have taken out to form your trench, on either side of it, as you will want it all to bank up your plants as they increase in size. Take care, also, that your melons, grapes, &c., or any things under glass, do not get

burnt by the heat of the sun. During the hottest time of the day, therefore, give a little protection with matting, or with old gauze or muslin curtains; some gardeners, too, recommend whitewashing the glass, but there are some difficulties and objections to this process. Grapes, also, may require thinning again,

those left thus increasing in size, and their ripening thereby materially hastened. Finally, as it is the month in which, to use a Yankeeism, everything is "going ahead," particularly the weeds, additional attention should be paid to order, cleanliness, and regularity throughout the entire garden.

HOW TO GET STRONG AT THE SEA-SIDE.

BY A FAMILY DOCTOR.



IN the present paper, and in my own homely way, I mean to tell you something about sea-bathing and how to profit by it. I must divide my subject into three heads:—First, Who should go to the sea-side; secondly, What to do first when one gets

weakened, either from excessive business or excessive pleasure, or from study and mental fatigue, and the worry inseparable from the struggle for existence, which every one of nearly every rank must now-a-days maintain.

To invalids, on the other hand, and convalescents from severe illness, or acute disease, the pure and balmy breath of ocean and the calming, toning saline bath, are particularly grateful. To delicate children, and especially those who have to dwell all the year round either in flat marshy country places, or in the murky atmosphere of populous towns, the month or six weeks at the sea-side are often the very first start in life, both as regards sturdy growth and vigorous health.

I shouldn't be much of a family doctor if I didn't specially mention one other being, for whom the sea-side has a particular charm, and who deserves a holiday more, perhaps, than any one else. How often I have watched her—the young mother—as she sits on a rock, dreamily gazing seawards, where white sails lie becalmed, and cloud-shadows here and there darken the sun-glazed ocean! Her youthful family, a cheerful triplet, are chasing the wavelets as they ripple back over the sand, and their laughter is shrill and joyous as the cry of the sea-bird.

Secondly: What to do first, when one gets to the sea-side. Well, to begin with, it is to be presumed that you have left all your cares behind you. Believe me, if you haven't, your holiday will be spoilt, your money worse than lost. In order to derive the maximum amount of good from a sojourn by the sea, you must for the time be completely free from both trouble and business. I wouldn't even allow my business letters to come poking their unwelcome noses around my breakfast-table when a dweller by the sea. What good will it do you to roam about the cliffs in the gay sunshine, and sniff the breath of ocean, if Daddy Care is at your elbow? What matter how regularly you bathe, if that nasty old skeleton, which you forgot to lock up in its closet, comes grinning alongside of you? That will spoil your fun.

But we will suppose that you really have taken the precaution of casting care to the wind, and that you mean in a quiet way to enjoy yourself. Suppose, too, that you have consulted your physician as to the best place to go to, and that you have neither started too soon nor too late—for remember that sea winds blow both keen and cold at the beginning and very end of the season. Then having reached your destination, your

there; and thirdly, How best to benefit by the holiday.

First: Who should go to the sea-side. I know well enough that nearly every one wishes to go, but for obvious reasons somebody must stay at home.

Besides, some people don't deserve to be let go at all: notably those who have neglected the common laws of health on which, in this Magazine, I have been preaching, simply but earnestly, for a twelvemonth back; who have been too lazy to take sufficient exercise; who have kept late hours, when early to bed would have suited them better; who have been slaves to the wine-cup, or the tobacco-pipe, or the groaning table; who have not daily offered the matutinal sacrifice of half an hour at the shrine of Hygeia, in the shape of that king of comforts, the cold bath. But I am soft-hearted and would not willingly deprive even this class of the joys of the "annual wash." Let them go and promise to be more careful for the future! But still let them not forget that sea-bathing does one infinitely more good if it is indulged in with an easy conscience—that is, if one feels that, by strict attention to duty, business, health, and economy, in the months gone by, the holiday has been honestly earned. If it has been so earned, with what thorough gusto one can sit down and pore over the time-tables, and endeavour to solve the welcome enigma, "Where shall I go this summer?"

Persons who may expect the greatest benefit from a month at the sea-side, are those whose health has been

GARDENING IN AUGUST.



AUGUST is here in all its luxuriance; and those of us who are not disporting ourselves on the beach, will find plenty to do at home in the garden—more, perhaps, than they can well accomplish. One of the first things, then, that we must put in hand is the taking of cuttings for our next year's supply. It is important that we set about this early in August, as, if our operations are postponed much later, and a wet and early

autumn should chance to overtake us, the probability is that our young plants will not thrive, and will eventually "damp off" altogether. Geraniums will, of course, chiefly occupy our attention. From the largest and best-grown plants, then, take off your cuttings with a sharp knife, bringing your blade parallel with the ground—cutting horizontally, in fact. The knife should be applied close to the under part of a joint. The cutting itself will be, perhaps, some six inches in length, and will consist of some four or five joints. The growth or general formation of the parent plant will, however, very naturally entail some variety when speaking of the *length* of our cutting, or of the number of joints upon it. In the next place, cut off the leaves from the two lower joints, and at once plant the slips out either in the open ground or in pots. Let the earth cover the two lower joints. If you prefer planting them out in the open garden, the ordinary soil will do: put them in the sun, and don't give them too much water. Here again, however, a good deal must be left to common-sense, and our mode of treating them must necessarily vary in accordance with the heat or rain of the season. Of course, when October comes, and we are beginning to hurry most things under glass for winter quarters, the cuttings must be taken up and potted off separately in small "sixties." On the other hand, if you now prefer striking your cuttings in pots at once, use large "forty-eights;" let your soil consist of, say, loam and leaf-mould, with a little sand on the surface. You can easily get some five or six cuttings in one pot, placing one in the centre and the rest round the edge; press the sand pretty firmly down afterwards, and give a little water. Do not neglect, first of all, to put one or two pieces of broken tile in your pots before filling them with soil, to serve for the purpose of drainage, as well as to bar the entrance, through the small hole at the bottom, of slugs or worms. Your pots can then go at once

into your house, or they can stand out in the open garden. The latter plan is perhaps preferable, as it will, by the time that the autumn has set in, have rendered the plants more hardy. Do not, however, stand the pots upon the ground, but upon a long piece of timber or some old boarding. Should you run short of pots, a very little ingenuity will readily suggest a substitute; old fig-boxes, &c., answer the purpose very well, a few holes being first of all bored through them; discarded saucepans or kettles—which, by reason of infirmity, will probably not require the same preparation that the fig-boxes did—would alike supplement your pot deficiency; as, recollect, cuttings are taken not for exhibition, but merely for the purpose of preservation. Verbenas should be always struck in pots. Cuttings from fancy geraniums should have been taken fully a month previous to the present time, or as soon, at least, as they have finished blowing. Now that we are on the subject of rearing young plants, a few simple directions might be given for the treatment of carnations and picotees, their popularity being readily admitted. Early in August is the time for "layering" them. The process is simple enough. As they are going out of flower, they throw out shoots from the base of the stem, and it is these young shoots with which we have to do. From the bottom part of the shoots, strip off the leaves; then with your knife—always sharp, of course—carefully cut a slit in the young stem just underneath the third joint from the top. I do not mean cut the shoot *off*, but cut barely *half-way* through its stem, *then* bring your knife upwards, say half an inch, towards the leaves that you have left on the top of the young shoot. Next, cut square the *end* thus made of the little shoot that you have partially separated from its connection with the parent stem, and bend the shoot gently down, inserting this *end* under the surface of the earth. Good common road sand, by the way, is the best to use on this occasion, so that you had first better put a fair quantity of sand on the surface of your soil all round the original stem before commencing your operations. It will be at once apparent from what has been said, that your young shoots—or, as they should be now called, "layers"—must be properly pegged down. Water them carefully afterwards, and continue doing so at intervals. You will thus, in a few weeks, have several young plants struck, all branching from one parent stock, just as the larger wires, to which the silk is attached, appear to spring from the pointed end of an umbrella-stick when the umbrella is opened.

Mignonette, again, is deservedly a universal favourite. This should be sown in pots about the first week in August, for blooming in the greenhouse in the February following: a time when, perhaps, we more appreciate the beauty of flowers even than we do now. Place only a light covering of earth on your seed. Now of course, also, is the time, when the weather is generally dry and hot, to gather all the flower-seeds that have ripened—such, for example, as the sweet-pea,

convolvulus, &c.—otherwise they may probably be lost, not to mention the unsightly appearance that the ugly brown pods present if allowed to remain on. All withered stalks and leaves should constantly now be cleared away. Not only will a general aspect of order and tidiness be your reward, but you will thus facilitate the continuance of the blooming of many flowers.

A few words again about our gravel walks. In the month of June we adverted to their frequently weedy condition, and the trouble they thereby occasion. In some parts of the country, the only gravel that we are able to procure is hardly worthy of the name; in addition to which, it is always an expensive article; this is particularly the case in sandy and clay soils. Not only so, but in the winter—generally after a thaw—it is hardly possible to walk at all upon much of our so-called gravel. We sink helplessly in as we go along, it clings to our boots—indeed, almost draws them off—and our temper is soured as we plunge through a substance more resembling half-made toffee than gravel. This was once my unhappy lot; but for my kitchen garden-paths I tried an inexpensive remedy, which has certainly proved a decided success. From some gas-works in the neighbourhood I procured upwards of a hundred gallons of tar, at the cost, I think, of a penny a gallon, and I also borrowed a large caldron from a factory near at hand, in which to heat my tar. This I did in gipsy fashion, with the well-known three sticks; next, we had in a load of sand—half-a-crown—and then gardener and I set to work. We first picked up the walks, raking them over smoothly afterwards, and taking away over-large stones. On this we then poured the boiling tar, ladling it carefully out so as, of course, to avoid injury to the box edgings, it being unnecessary to add that the tar dealt instant death to any vegetation that came in its way. Nevertheless, with all our care, some of our box was certainly killed. A good sprinkling of sand was then thrown lightly over the tar, so as to cover it, and the new paths were completed. If you try the experiment, of course you must not walk on your paths for two or three days after they have been finished. It is ten years since I did my own, and they are now almost in as good condition as when they were first done. In addition to the firm and sound walk which you will now always have, it is a consolation to know that the weeds will no longer grow in your paths, and that no more rolling will be necessary. Hot and dry weather must, of course, be chosen for your operations.

We have but little space remaining in which to advert to the fruit, kitchen-garden, and greenhouse, &c. Currants, more especially white ones, will hang long on the trees in a good state of preservation, particularly if protected from the birds by a net. I well recollect, in Kent, picking a large dish of white cur-

rants early in November, from a tree that, owing to its standing in a somewhat concealed position, had been overlooked. No net or matting had been placed over it, and the currants were not at all shrivelled. As our fruit is ripening, the wasps, slugs, and birds are a triple alliance with which we find some difficulty in dealing; but the two first are the most insolent and destructive, for I do not hold with the destruction of small birds. They gave us so much music in the spring, and ate so many insects, that in charity let them have a little fruit now. At present, however, they are in alliance with what we cannot but regard as a scourge, just as Adam was of old taught to recognise the thorns and the thistles. Wasps, however, are very greedy, and can be attracted by bottles hung up, in which put a little treacle, or sugar and beer; but it is better to lay siege to their strongholds an hour or so after sunset, by burning pitch at the entrance of their nests. Those that come home will all fly straight into the flame notwithstanding. Slugs and snails are not so easily trapped. I have often put a lettuce or a cut-up apple at the base of nectarine and peach trees, but they are cunning enough to pass these by, and show their good taste by climbing the walls after the fruit. Do not, however, put salt down; you might kill your tree. Last year, when much annoyed by them, I found the best plan, after all, was to go out at ten or eleven o'clock at night with a lantern, and surprise them at their work. The collection that I made of the enemy in a flower-pot, made an instant but horribly delicious supper for my pigs. Persisting in this for a night or two, I soon reduced their number. Do not, either, allow the little fingers, in their curiosity and impatience, to pinch the wall-fruit in order to see if it is ripe. If you are gifted with a fairly good power of scent, peaches, nectarines, melons, and plums, will all give warning of their being fit for table by a delicious fragrance, first of all. The pinching bruises and spoils the fruit, and it will be quite the end of the month, and perhaps well on into the next, before the bulk of it is fit for use.

Grapes, of course, are rapidly colouring: we are speaking of those under glass, but which have not been highly forced. Let them have, then, a small current of air day and night, because the colouring matter is produced by the action of the atmosphere.

In vegetables, see that the celery is banked up as it requires it, else all will be spoilt, or certainly not white. Get in brocoli wherever you can; and, early in the month, sow cabbage-seed for your main spring crops.

It is unpleasant to conclude our paper with onions. Nevertheless, they are most indispensable. When they have been taken up, let them lie on the ground for awhile exposed to the dry weather—this will materially improve them before they are stored away for use.



GARDENING FOR SEPTEMBER.

SEPTEMBER is often one of our finest months. Once more, then, we will get into the garden, and see what there is to be done. Hitherto we have devoted, perhaps, the bulk of our remarks and directions to flowers and their general cultivation; now, however, for the very apparent reason that we have entered well into harvest-time, the kitchen and fruit garden should first claim our attention.

Potatoes, which, as an article of daily food alike for the million and the millionaire, rank perhaps only second to bread, will not unreasonably occupy us at once. By this time the greater portion of them should be dug and stored away in some dry place, as it is certainly inexpedient to leave them too long in the ground when they have reached their full maturity. When we say "dug," we do not mean dig with a spade. Horticulturally speaking, you will play "old gooseberry" with them if you do, for you will cut half of them in two. Even with a fork—which is the proper thing to use—considerable care should be taken, as if you put your fork into the earth too close to the base of the stem of the plant, you will be perpetually and provokingly lancing your subterranean crop with your awkward trident. When lifting your potatoes, then, make them out as you go along, we will say, into three heaps; the first consisting of the good and sound ones, for use; the second of bad and diseased ones, for which, as also for the *very* smallest ones, our good-natured and unfastidious scavenger-friend, the pig, will always thank you; and the third heap of those which, as they are rather too small for table—for cook would never be at the trouble to occupy her time by "peeling rubbish like that"—will do well for planting another season as "seed potatoes." It is well, however, not to dig your stock until the plant itself has mostly died down; for it is a pity, especially where your crop is not a large one, to get them up before they have reached their full size. The contrary practice is surely extravagant and wasteful. Here again, however, we must postpone or hasten our operations in accordance with the heat or the advance of the season, and with the general appearance of the crop. Don't let your potatoes be afterwards exposed to damp, frost, heat, or rats. There is hardly anything, by-the-way, especially in old country-houses, which is not by turns the prey of these last-named destructive vermin. I write feelingly, for I have not yet forgotten their devastation among my own potatoes, which were stowed away carefully in a dry cellar. It has been said that property and goods, &c., to the amount of £1,000,000 sterling are annually destroyed or damaged in this country by rats; but though I have not the means of testing the accuracy of this estimate, I can readily believe it to be understated. A prosperous farmer in Berkshire told me, some years ago, that at one time his cost him some £70 per annum. Nor will it be out of place to mention, in passing, how my garden was but a twelve-

month ago curiously annoyed by them. From a heavily-cropping peach-tree I observed, on several successive mornings, that three or four large unripe peaches had fallen to the ground in the night. Some violence had evidently been employed; but I was wholly unsuspecting of malice, and ostensibly theft was not the object, for there were the peaches on the ground. The tree, however, was watched for a time, when a couple of fine rats were seen ascending the wall by means of the fruit, which appeared to serve them as a sort of staircase; while on the other side of the wall were some fagots, under which was the rats' home. My boy and some terriers soon assisted in making short work of them, and no more peaches fell.

Celery will, again, require earthing up. It is always better to choose good dry weather for this; avoid, as far as you are able, letting any of the soil fall into the heart of your plants, the heads of which should also be tied as the season advances. Winter spinach, too, that has been sown a few weeks previously, should now be thinned out, but not too much: some gardeners, indeed, hardly thin it out at all. This most useful vegetable will last on a long time, particularly if care be always taken when it is picked to choose only the outside and larger leaves, leaving those less developed to gain in size. Peas, beans, &c., and other vegetables that have done their work, must now be cleared off your land to make room for new crops. The ground will want afterwards well digging and manuring. Do not throw away your old cabbage-stumps when you are clearing the space that they have occupied, but plant them all again pretty close together in any out-of-the-way corner of your garden; the sprouts that they will afterwards throw out will probably come in most usefully during the winter dearth of vegetables.

Vegetable-marrows, now that they are in full luxuriance, have a very straggling appearance, and may require to be kept in check with a little management and training. Indeed, their untidiness once induced an old lady enthusiast to tear off an enormous arm from the plant, which she indignantly took to her gardener, begging him in future to be more particular in keeping down the weeds!

Melons that have been grown under ordinary frames are now rapidly ripening; keep your glass closed over them as much as possible, to husband all the heat that you can, for it is "now or never" with them. Let them have little or no water at all, as the discontinuance of watering will hasten them on. It is important, also, that Morello cherries be only gathered when they are dry.

Peaches and nectarines are now beginning to fall as they ripen; this should be provided against by putting some gauze netting over the wall, that would project outwards, or by placing a good heap of cut grass from your lawn at the base of your tree, so as to prevent the fruit bruising by its fall. Gather your fruit carefully by hand; if it requires very much pulling it is

not ripe. As we said last month, the nasal organ is of great service to test the condition of your fruit. It rather savours of the Emerald Isle to say that what are popularly known as the "October peaches" are very often ripe before the end of September; this is, nevertheless, frequently the case in a good season. These peaches are of a particularly large and fine kind, and generally swell off wonderfully during the last two or three weeks. Should it so happen that you have impatiently gathered your wall-fruit a little too soon, place them—all apart from each other—on a table by a window where you have most sun, and in a few days' time you will find that not much harm has been done. Fruit, however, gathered recklessly before its time will not ripen, but will only wither, particularly if there be wet and cloudy weather afterwards to deprive you of the only chance of rectifying your mistake.

Any one who can suggest some safe and certain remedy against the hosts of ants and earwigs which delight to torment us at this time, will confer a great boon upon all lovers of the garden,

whether of fruit or flowers. Fowls and pigeons, it has been said, are "bad gardeners;" yet even these have been recommended by high authority for the purpose of waging war against the insect foe: unhappily they do not always confine their attention to insects.

Perhaps the earwig's chief delight is to attack the dahlias. This will bring us at once to give the remaining portion of our paper to flowers. It has been often said that one wasp destroyed in April or May, is equivalent to the destruction of a nest in September; and the same holds true equally with regard to the earwig. One of these miserable little creatures, that has early secreted himself in a dahlia, is sufficient to disfigure its beauty. This showy flower, the aster, and others play a conspicuous part in our borders this month. Let them—and particularly the first-

named—have some protection against high wind. The dahlia wants water, and, if it be not in a healthy condition, a little liquid manure will be of great service to it. The flowers upon it that have already bloomed should, of course, be removed; but let one or two remain on for the sake of the seed, should you wish to preserve any.

Probably by this time the carnations and picotees that were layered last month have well taken root; in which case, let them be cut off the parent plant and potted off. In gardening, if in anything, the motto

should be surely "Look ahead." Attention must, therefore, be paid to making a good selection of hyacinth bulbs. There is an endless and most charming variety of them, and very fortunately we can with little trouble get a handsome show of these at a time when other flowers are scarce indeed. Those which you intend to bloom in water-glasses had better be divided into two classes—*i.e.*, put in only half of your stock now, and the other half three or four weeks later on. The process is known to most of us. So fill



POTATO PLANT AND TUBERS.

your hyacinth-glass as to allow the surface of the water—soft water, by-the-way—barely to touch your bulb; otherwise the bulb is liable to become rotten. When the small fibrous roots have thoroughly made themselves apparent the water must be changed, say, every three weeks. In doing this take care not to break off any of the roots. For the first month put your glasses in a dry, dark cupboard, but afterwards, when exposed again to the light, take care that frost does not get at them, which would probably entail death both to bulb and glass.

Mignonette may, again, be sown so as to have a succession of bloom all the year round. In your green-house, ferns should now be in rich profusion, and you can afford to cut plentifully from them for table-decoration, for which nothing is more effective.

communicated to these little sacs, are intensified by the movements of the limy particles, and are thus transmitted to the structures representing the nerves of hearing. We say "representing" the nerves, for no traces of a nervous system have yet been discovered in the jelly-fishes. But as we know that in certain animals very nearly related to those organisms nerves have been actually found, we may rest assured that the progress of research will either demonstrate the presence of nerves in the jelly-fish, or, what is perhaps more probable, will show us the structures which do duty for these important filaments.

The jelly-fish is thus seen to be tolerably well provided with the organs and parts found in higher animals. It also possesses certain structures adapted for offence and defence, which are highly characteristic of the group of animals to which the medusæ belong. These structures consist of cells, named "thread-cells." They are found in the sea-anemones,* and in other animals of near relationship with the jelly-fishes, and by their aid the latter are enabled to sting severely. The unlucky bather who comes in contact with the trailing tentacles of a large medusa must therefore ascribe his prickly torture to these thread-cells, each of which is a miniature poison-apparatus. And in respect of this feature of medusa-existence, their being named after the Gorgon of old is appropriate enough, seeing that these creatures are not altogether destitute of habits which belie their otherwise graceful appearance.

Very nearly allied to our common jelly-fishes are some creatures common in warm seas, but which adverse winds and tides occasionally cast on our shores. Most curious of such forms, perhaps, is the little *Verella*, or "Sallee Man," as it is popularly named. This little jelly-fish is wafted about through the agency of a veritable sail, which exists in the form of a delicate crest, arising from the flat body, which is

coloured of a beautiful blue, and consists of a delicate transparent substance. Then, also, we sometimes meet with the "Portuguese Man-of-War" on our own coasts; this organism being a jelly-fish of some eight or nine inches in length, which supports itself in the water, like Shakespeare's "little wanton boys," by means of a large bladder-like structure, named the "float." The latter form stings so severely when touched, that the effects of its thread-cells have been known to persist for weeks after the date of attack.

A concluding feature of interest in the history of the jelly-fishes and their allies, consists in their connection with those rooted and plant-like organisms found attached to rocks and sea-weed, and which are known as "zoophytes." We have been describing the structure and history of the *true* jelly-fishes, which have no relationship whatever with zoophytes. But there also exist in the summer seas, countless myriads of small jelly-fishes, ranging from the size of a pea to that of a walnut, or larger, which so far from being separate and distinct animals, are, in reality, the free swimming buds of the compound animals we name "zoophytes." Thus we see a fixed, plant-like colony of animals giving origin to jelly-fish buds. The latter swim freely about in the sea, and exactly resemble the well-known medusæ. Then, after a time, these jelly-fish buds produce eggs; and, strangely enough, from each egg of the floating medusa, a plant-like zoophyte is in turn developed. The jelly-fishes in such a case are simply the reproductive bodies of the zoophyte; but the fact presents us with a strange example of the manner in which the relationships of animals may apparently become commingled and confused. Naturalists were at first much puzzled to account for the strange fact of a jelly-fish acting as parent to the zoophyte; and the mystery was only explained—as, indeed, all Nature's secrets are—by a patient investigation of the forms and phenomena she offers for the instruction and delight of every seeking mind.

GARDENING IN OCTOBER.



It is somewhat difficult to appear monthly in the same capacity which at present occupies us, without rushing at once, and with an awkward abruptness, upon the interesting subject of fruit and flowers that we are again about to discuss. Yet, probably, no one will thank us if we periodically think it necessary to bore our readers with some pretty little cut-and-dried sentimentalities and platitudes, or some touching and appropriate poetical allusions, before entering upon our more matter-of-fact hints for the garden. As, however, we are not setting up an eminently scientific horticultural text-book, which is to cut out everything else of the kind that has ever appeared, but merely wish to have a few pleasant gossips over the hedge

with a kind-hearted neighbour, who has just told us that he is very anxious to be more enlightened, in a general way, upon the subject of the best method of cultivating the acre of land round his pretty cottage, we prefer first of all to shake his hand, and ask him how he is this rimy October morning.

Bertram, however, already thinks we have been talking quite long enough without coming to the point; for with one eye only on his father, he has fixed the other earnestly on yonder apple-trees, that are well-nigh breaking down with their rosy load, anxiously hoping that something may soon be said about *them*. Nor is he far out in his reckoning, as we shall presently see.

"Chill October," then, finds us still tenaciously clinging on to summer, though by the tip of its tail. That is certainly not a very sentimental beginning. Nevertheless, we may call it a fact, for there are all

* See CASSELL'S FAMILY MAGAZINE for August.

our bedding-out plants, our geraniums, calceolarias, verbenas, &c., still in their places, and we have not quite the heart to take them in yet. We like to call it summer still. That equinoctial sou'-wester though, the other night, and those two or three slight white frosts that followed it, tell us very unmistakably that it is imperative upon us to do so at once, if we wish to preserve any of them alive through the winter. Fortunately for us, towards the end of last month, we had the greenhouse thoroughly prepared for the reception of our flowers into their winter quarters: the flue was carefully swept, and a little necessary painting and whitewashing done inside, and afterwards one or two fires were lit to dry the house thoroughly off. Those of us, however, who are necessitated to try annually the seldom successful experiment of growing a few grapes under the same glass that we have for the preservation of our flowers, and which we like to call by turns the "greenhouse," the "conservatory," the "grapery," will not of course have attempted the inside painting of the house just as the grapes are almost ripe. For those thus situated, early in March is perhaps the better time, when the vine looks not unlike a long brown bamboo cane, and when, as the buds are hardly then making a start, it could be safely detached from some of its supporting wires, nails, &c., for the purpose of painting. But where you are obliged to combine grapes and flowers, the grapes as a rule will suffer before the flowers. One of the fruitful causes of mildew is an overcrowded and ill-ventilated house; and where you are, as in the not uncommon case that we are supposing, cramped for room, you are naturally perhaps, in some sense, unavoidably more exposed to this evil. Then again, the gases necessarily generated where many plants are present, can hardly fail to have an injurious effect upon your vine. Place a large bell-glass, *e.g.*, over a single plant in a pot, and you will see on the glass the next morning the traces of the process of exhalation in the shape of heavy beads of water clinging to its inner surface. Yet I think I hear some one say, in a half-veiled tone, "Well, I cannot afford in these days of strikes and extortion, and when everything costs three times what it did ten or fifteen years ago—I cannot afford to build a grapery, and a greenhouse, and a conservatory; still, I want to have my grapes and my flowers, and I mean to try and go on as I am now managing." Our general advice in reply to such is: give ventilation, some at least, all the year round; plenty of it in summer, a good deal in the spring and autumn, and, with caution, a little even in winter. When your vines are in bloom, be a little sparing of much air, giving it only in the warmest time of the day. In the spring, when your camellias, azaleas, &c., have bloomed, they must still, unfortunately, be retained for some time longer in your house, whilst they are forming their new wood and buds for the next season; but your cinerarias you can at once discard, for they are better out of your way, as, like fancy geraniums, they appear to possess wonderful attractions for green-fly and vermin in general. Avoid, however, growing any very large plants in your greenhouse—we are still, of course, supposing the case

where grapes and flowers are grown in the same house—and when June has come, turn out everything that you possibly can, keeping in only certain ferns and those of your plants whose delicacy you know requires a perpetual Torquay atmosphere. Your ferns, by-the-way, like a moist heat, but never care to be exposed to the full blaze of the sun. Some of your larger plants that you turn out might stand very well at various corners of your garden-paths. Now, however, our grapes are mostly cut, and we are in October, and compelled suddenly to fill up our house, perhaps to the very top. All your stock of cuttings taken in August, if struck in the open borders, must at once, if they have not been already taken up, be potted off and housed. Your young calceolarias will live easily through the winter under a cold frame: these need not be in pots at all, but in the earth itself, and being fairly hardy, will require little or no attention. Those of your plants that you are now taking up, and that you may want to preserve—some, *e.g.*, of the finer and well-grown geraniums—had better be cut in pretty closely and potted off. The preservation of plants through the winter, without the help of glass and a stove, is certainly a matter of great difficulty—we might almost say of impossibility when the season is a very severe one. Some have tried to preserve their geranium stocks in boxes placed in a shed or in any unused room, but frost or damp generally finds them out fatally. Others recommend digging a hole sufficiently deep to admit your flower-pots, covering it over with a roofing of boards and mats, &c. The experiment can be tried, but success is, to say the least, doubtful. Dahlias, when taken up, can be easily preserved, always of course assuming that neither heat, frost, nor damp is allowed to get at the tubers. It is best to keep them stem downwards—at all events, for a short time after taking them up. Put them then, say, in an old croquet-box under the stage of your greenhouse—anywhere, in fact, away from the cold. Among the roses, where you have remarked that the shoots have grown unusually long, they might now be shortened with advantage; see, too, that they are well protected against the heavy gales that some of us—who have neglected the precaution of securing them well to their stakes—know, to our cost, generally begin blowing about this time. The chrysanthemums—our last remaining hope for next month—that are potted off and in the greenhouse will want watering carefully.

It is time here that we again turn our attention to the kitchen and fruit garden, but, as before, it is wholly impossible to do more than touch upon a few of the leading heads of work that occur to us. First, then, the remainder of the potato stock must be got up and stored away safely; carrots, beet-root, and parsnips must be similarly served. Pile them up in a heap in a dry corner of your cellar, and no harm can come to them; a little sand or *thoroughly dried* earth scattered afterwards over and among them is a good thing.

Peas—making choice, of course, of the hardiest sort—might be sown now for an early crop. As they are to face all the severity of the winter, sow them deep in

drills, in poor soil, and in a sheltered situation. Later on, when the worst of the winter is over, they will necessarily require attention, of which we may perhaps say something when the time comes round. And now for the fruit, for we promised at the outset not to forget that.

First, then—*plaudite omnes pueri*—there are the apples and pears to be gathered. And let us give our eager young friends, who are doubtless burning to give gardener a helping hand, a little piece of advice by way of a caution. It will never do to “shie at them,” for on no account must the fruit be bruised. Only those apples can be admitted to the store-room which can be guaranteed as gathered by hand and placed—not bumped, or pitched violently—in the hampers or whatever are your receptacles for them at the bottom of your trees. Nevertheless, as it is perfectly impossible to avoid many casualties during the process of gathering the fruit, it is well to have a second hamper, in which to put by themselves all those that the ladder, eager climbing, clumsiness, &c., have caused to fall to the ground; and see afterwards that these apples are the first to be used, for it is notorious that bruised fruit never keeps for any length of time. Frost and damp are again the enemies with which we have to contend. Pears it is certainly better to put on shelves, so arranging them that one does not touch another. Apples may be treated a little more roughly. Lay them on straw—it does not much matter if they are close together; nay, some even put them by in heaps as you would beet-root—and then cover them over also with straw. One thing we should premise—they must be gathered when thoroughly dry. Experience of your own trees will tell you which are the best ones for keeping sound. Those very large, green and not particularly rosy, but luscious ones, commonly known as the coddings, are perhaps about the worst to keep. They seem to have a wonderful facility for turning utterly brown without any apparent cause, and are frequently seen rotten upon the trees, although even held on firmly by their stalk. It will, however,

be generally found that they ripen often as early as the middle or end of August, and they will naturally therefore be the first used. Nor will it be much to our purpose to enumerate all the various kinds of this most popular and domestic fruit. Sometimes it would almost seem as if each county had its own peculiar “weakness;” one sort thrives better here, another there; here they are scarce, or, as we should say in Kent, “platty;” there they grow in profusion. I recollect some years ago, when travelling outside a Herefordshire mail coach, at a time when apples are supposed to be ripe, being tempted to make a dash at one which came within my reach from an overhanging bough of a tree under which we passed; nor have I either forgotten the grim delight of the coachman, as he looked into my distorted features, for I had as speedily ejected my spoil. The quality of the fruit was evidently known to him, while it is needless to add that to myself it evidently was not.

If it be a good season, grapes grown “in the open” will be now rapidly ripening. The fruit may require some protection; do not, however, strip any leaves from your vine, and see that it is secure against damage from high wind. As October advances, wasps and large flies begin to crawl lazily about, but will more than ever appreciate the warmth of your greenhouse. Those grapes therefore that are still hanging under glass on your vine, it is well to protect by drawing gauze bags over them. Your melons and cucumbers are over, but you can yet make some use of the frames in which they were grown. Clear off the plants, stir the earth and manure about a little, and place on its surface a little mushroom spawn, and in a few days you will have a very delicious accompaniment with your next steak. If you are particularly fond of mushroom gathering in the fields, pray make a careful selection, or the consequences might be most serious. Mushrooms easily peel; toadstools, as a rule, do not; a pleasant earthy fragrance, too, pervades the one, and most generally, a particularly unpleasant fragrance the other!

SOME SIMPLE DIRECTIONS FOR THE PREVENTION OF SICKNESS.

BY A FAMILY DOCTOR.



NCE upon a time, as fairy tales begin, there lived somewhere in England a very naughty old gentleman; and this ancient party, going out one stormy winter's night, and being used to a warmer climate, caught a severe cold, which settled on his lungs. Then this bad old man was in great terror, and sent for the apothecary, and then for the clergyman, and made a vow that, if spared to get well again, he would give up all his naughty ways, and live the life of a saint. He did

get well, but no sooner was he about again than he forgot his vows, and took to all his evil ways once more. Now, those of my former papers which were dedicated to the Hygeian goddess have been mostly addressed to the sick: *moral* from anecdote above—it is very easy to preach to the sick; you are sure of a *patient hearing*; but a much more arduous task is mine in the present paper—I have to talk seriously to the hale and hearty. Do you know that out in strange seas, in tropical countries like those that wash the shores of Africa, and which are but badly represented on charts, a man is always stationed at the mainmast-head, to give timely warning of the vessel's approach to shoal-water, or breakers ahead; and that thus

Mr. Hartley's hurried nuptials, and she was delighted to have such an excellent opportunity of making herself amends.

For many hours each day Keziah locked herself in her pantry with her cookery-book, to emerge presently, hot and tired, but exultant. Sometimes, when she had filled her oven, she would trip up-stairs, with her floury hands folded in her apron, to watch the sisters as they worked at Grace's simple *trousseau*, and confess that she should not feel quite easy till "that cake," the greatest of all her essays, was off her mind. But as the bride-cake proved an unqualified success, and the breakfast a triumph of culinary art, Keziah considered herself amply repaid for all her labours.

Gracie Wynyard's was intended to be a very quiet wedding, but some one—could it have been the Squire himself?—was indiscreet enough to divulge the hour fixed for the ceremony; and Darlestone Lee, coming home to Emstone moody and disagreeable, having failed in winning the City heiress, found no one to listen to and commiserate him, his mother and Tishy being too much engaged in discussing the all-important event that had just taken place. He had to listen perforce while they told how the paths leading to the church had been thronged with folk of all classes; and how the children of Gracie's class, led by Mr. Samplin's merry daughters, had smothered her with flowers as she came out of the sacred edifice, with Marian almost as bride-like, in a glossy silk of pearly grey—her father's present—close behind her.

Flinging out of the house where these gossiping details irritated him beyond endurance, Darlestone Lee plunged into the wood that skirted the common—the scene of his first walk with Marian—strolling farther and farther away from the village and the sound of

the bells, till he found himself at the summit of the hill, and within a hundred yards of Frank Hartley's house.

A travelling carriage was just leaving the gate, and, as he stood concealed by a clump of firs, he was able to see the faces of its occupants without being seen.

They consisted of Mr. and Mrs. Wynyard, who would sail from Southampton on the morrow; Gracie and her husband, who proposed leaving the same port to spend their honeymoon in the Channel Islands; and with them little Ella and her nurse. At the moment they drove past the place of Darlestone Lee's concealment, Mrs. Wynyard was weeping behind her veil, while the Squire was holding Gracie up that she might wave a last adieu to Marian, the warm-hearted sister and daughter, who had never seemed so dear to them as now they were bidding her a long farewell.

The carriage rolled on. Darlestone Lee, his brow more cloudy than before, retraced his steps; Keziah, who had distinguished herself by throwing an apronful of rice and old slippers after the bride, returned into the house, breathless but content; and Frank Hartley drew nearer to Marian, who, through the tears that dimmed her eyes, was still watching the road adown which those she loved had passed from her sight.

"This parting is a trial for you, my Marian," he said tenderly, "which not all my love could avert."

"But that love will teach me to bear it," she replied. "I shall miss them all, but they will write often; and I cannot be unhappy, Frank, for I have you."

Her smile was so sweet, so full of trusting affection, that, careless who saw him, he stooped and kissed her, murmuring reverently in his gladness—

"Now God be thanked for the hour that gave to me my little wife, my Marian."

THE END.



GARDENING IN NOVEMBER.

It is certainly of no use to talk about summer any longer. Yet, as old Mrs. Scratchet comfortably remarked the other day, in accordance with her annual custom, "I always think as St. Luke's little summer is such a help through the winter," we cannot but agree with her. But, alas! even this is now a consolation of the past, and we are fairly embarked on dreary November, the month in which it has been said—though with what truth I know not—that there are more suicides than in any other month of the year. We will, however, "away with melancholy," which under no circumstances is justifiable, least of all when we are meditating on the ever-changing seasons of the year, for the study of nature is surely a deeply interesting

one, and, to a well-balanced mind, always suggestive of bright hope for the future. We will not, then, look askance at the leaden sky, or shrink from facing a little cheerless cold, but get once more into the garden for some healthy exercise and occupation. Nevertheless, before commencing November operations in general, we are, unavoidably it might almost be said, brought to a standstill, and find ourselves making sad reflections on the very desolate appearance of the scene around us. For we were on the point of gathering and sweeping up a quantity of dry leaves that the gale of the night before had sent eddying over the lawn and across the now deserted flower-beds, when, leaning upon our broom, the thought occurred to us, Was it then really necessary to have our flower-garden regularly, for seven months in the year, presenting the uninteresting spectacle that it now did? Were our forefathers such slaves to the bedding-out system as we have now become? Why, for the sake of having our artificially-shaped beds one blaze of scarlet

geraniums, with little or nothing else to relieve its formality, for barely the space of five months out of the twelve, are we to forego the pleasure of having any flowers under our windows to feast our eyes upon for the remaining seven? Besides, there is something which strikes us as almost ludicrous in the present appearance of our beds, and this is but the first of the seven blank months. To employ a very homely and domestic parallel, it would be hardly more absurd, though perhaps a little more mortifying, to place before an expectant dinner-company a quantity of empty dishes. The truth is that of late years we have become universally artificial and unreal. We are artificial in our dress, artificial in our habits of life and conversation, artificial in the very food we eat, and in our method of garnishing and decorations, and—what is more to our point—we are artificial in our garden. Yet it is pleasant to think that to some of us the memory of the good old-fashioned system is inexpressibly dear, and that a very respectable minority of us have still the courage to maintain it at all costs. There is something which savours more of welcome and hospitality in the round of beef, tankard of nut-brown ale, and bottle of port, than in five o'clock tea, claret which makes you writhe, or a made-up dinner from which you return in a condition of bilious hunger. Similarly, there are those of us yet who love afterwards, in preference to a solemn parade among the angular scarlet-blazing beds, to wander round an old-fashioned English garden. Let us be thankful that they still exist. I have one or two in my memory now. As you enter you are conscious of a perfume which the best manufacturers might well "give their ears" to surpass. There is a giant old walnut-tree at one end of the lawn, and as large a mulberry at the other. Round the borders there is any amount of larkspur, snap-dragon, and sweet-william, and then *such* roses! Ah! how we used to bud them and strike them! anywhere, and hardly one failed to take; and so lovely they looked in their variety! What piles of honeysuckle and jessamine there were! and what fruit we had! Yes, and we even had plenty of hardy flowers in our kitchen-garden, all round the borders—the wall-flower, the brilliant poppy, and the deep purple iris, each in its turn met our eye as we walked along. Now, it may be asked, what is our object during this desolate month of November, in breaking out suddenly in a panegyric upon old English gardens? Well, our object has been twofold. First, because, as we opened our observations with a lamentation upon the time of year, and the consequent cessation of flowers, particularly where we have been wholly devoted to the "bedding-out" system, so our natural consolation was to take refuge in a garden of the old-fashioned sort, where flowers last for a longer time, and where it is possible to have at least *some* flowers all the year round. Secondly, because, if it is desired to make any great and decided change in the garden, November is perhaps one of the very best months in the year in which to commence that change. Do not, however, let it be supposed that we are now advocating doing away with "bedding-out" entirely. On the contrary,

the best and the wisest suggestion that we can offer is a happy combination of the two systems—*i.e.*, the interspersing of bedding-out plants amongst the old-fashioned perennials. One great advantage, too, of a garden well stocked with these good old hardy perennials consists in this, that they require little or no attention. There they are—these herbaceous plants—dying down at the fall of the year, and up again as healthy as ever the following spring. Another great advantage that they possess is, that we can so stock our gardens with a variety of them as to have a certain amount of bloom all the year round.

To begin, then. In the very depth of the winter we can have the delightful Christmas rose, which will bloom even with the snow upon the ground. It is a good plan, however, when the bloom first begins to show above the ground, to cover your plant over with a bell-glass, as the beauty and delicacy of colour of the flower is thus better preserved, and its size even increased. Then, again, the Russian violet will generally bloom all the winter; next, by the end of January we get the winter aconite, and as the season advances we get in their respective order the snow-drop and crocus, the early squills, hepaticas, polyanthus, &c. By this time we are well into the spring, when the primrose, hyacinth, and early dwarf tulips almost suggest to us the beginning of summer, and it will be nearly time to fill up all the intermediate spaces with bedding-out plants. Let it also be remembered that now, early in November, is the time for parting and planting herbaceous plants, so that if we are bent upon alterations we can begin at once. In flowers, our present attention is, of course, paid to the chrysanthemum—our chief decoration for this month. Many of these are still doing well in the open air, unless any severe frost sets in. But under glass we can have a brilliant show. The chrysanthemum is a gross feeder, and likes a little liquid manure, and certainly a fairly plentiful supply of water. This is very important when they are coming well into flower. Those blooms, also, that have turned the corner and are beginning to decay had better be removed, as if they are allowed to remain on in this damp and dull season, they are rather liable to injure more or less others that have not bloomed, or are perhaps not so far advanced. When their beauty is quite passed, do not, however, cut down the old stem, as it will serve to protect the young suckers that you will see around it. In the greenhouse do not be too anxious to go in vigorously for fire-heat; recollect that you cannot do more than light your fire when the cold of January is the most severe. As long, therefore, as you possibly can, postpone any meddling with your stove, as, if you have regularly given a good current of fresh air in the earlier part of the autumn, you will have rendered your plants both healthier and more hardy, so that thus still less will any fire be necessary. Let the temperature of your greenhouse, then, be from forty to fifty degrees by day, and do not be alarmed if at night it fall as low as thirty-five—no harm can come to your plants. Except to the chrysanthemums, be sparing of water, only giving this in the

morning, and never use the syringe at all. Camellias now also require some attention. They must be kept regularly moist; they can hardly stand any fire-heat, for, if exposed to much of this, the buds will drop off without even having shown any sign of expanding; indeed, a little frost would be far less injurious to them than a hot stove. Now, also, is the time for getting any fresh supply of stocks for roses; on this head, and that of general directions for budding, we may remind our readers that we commented very fully in July last. Should the season be still a mild one, shrubs and trees can be moved, and attention paid to the removal of dead wood, and general trimming and pruning. In the kitchen-garden good heavy digging and manuring should now be done. Whilst engaged in digging, or turning up the soil with a fork, remove, wherever you see them, those horrible white roots of bear-bine, which, as many of us know to our cost, if allowed to get too much ahead will soon over-run the entire garden, and cause endless annoyance and untidiness in the summer. Who of us has not often observed strawberries, gooseberries, and currant-trees completely disfigured, and even injured, by this obstinate weed?

Let the asparagus-bed also be carefully forked, and a coating some six inches thick of manure be put upon it. At this time of year it is certainly not difficult to obtain a good supply of dead leaves. To make a bonfire of them is wasteful extravagance. Instead of this, cover over your sea-kale with them for the purpose of forcing it; dead leaves, too, make an excellent manure, which you can dig in, or when gathered dry, let your pigs have them first of all for a bed, and they will very soon tread them down. Beans and peas for an early crop may even yet be sown, but perhaps the experience of many of us is that the result of the peas, at least, is very frequently unsatisfactory. If your turnips are not already got up, they should be stored away at once—and give them some protection from cold. In the fruit-garden, pruning, digging, nailing-up, and transplanting are the things of the greatest importance. Lastly, pay a general attention to order and tidiness. It is, perhaps, rather difficult to maintain this when every wild night brings a fresh addition of leaves and débris; still, a little perseverance in this direction will, in some sense, compensate you for the absence of colour in the flower-garden.



IN THE BAY.

LET me rest on my oars, and breathe awhile before
I make my way
To the Drake Rock, where the waves are white
in the middle of the bay:

'Tis too chill these autumn mornings to lie for an hour
in the boat,

And watch the clouds or the moving craft, or to sit
with line and float;

The breeze is keen; go in, my oars; and away, my Good
Intent!

Let us go with a will, and show our love for this wild
merriment,

Like gulls with the wind in their wings, and the brine
of the sea for scent.

It was bravely done, my little boat; and now we have
made the rock,

That smiles in its grey granite strength at the giant
sea's roughest shock:

What a feeling of life and of freedom in this primeval
place,

Where the wind from a wilderness of waves brings
blood into the face!

See how each billow rears in its pride as it runs to us
and swells,

Then breaks on the pebbles with music soft as brooks
in wooded dells—

No wonder there should be voices in the beautiful
white-worn shells.

It is darkening now; we must put back, for I can feel
and hear

A coming, whistling, madcap storm that might give a
red salt some fear.

Right and ready! ah, now we are running before its
outstretched hand;

Warm well to the work, and half-an-hour will bring us
to the land:

We do not make much headway, my Good Intent,
though we seem to glide;

I remember, tide is against us; still, we are against
the tide;

Come, let us strain to our utmost strength; ah, now
we ride, we ride!

We are in smoother waters—steady; we have beaten
wind and tide;

ROCKWORK AND FERNS.

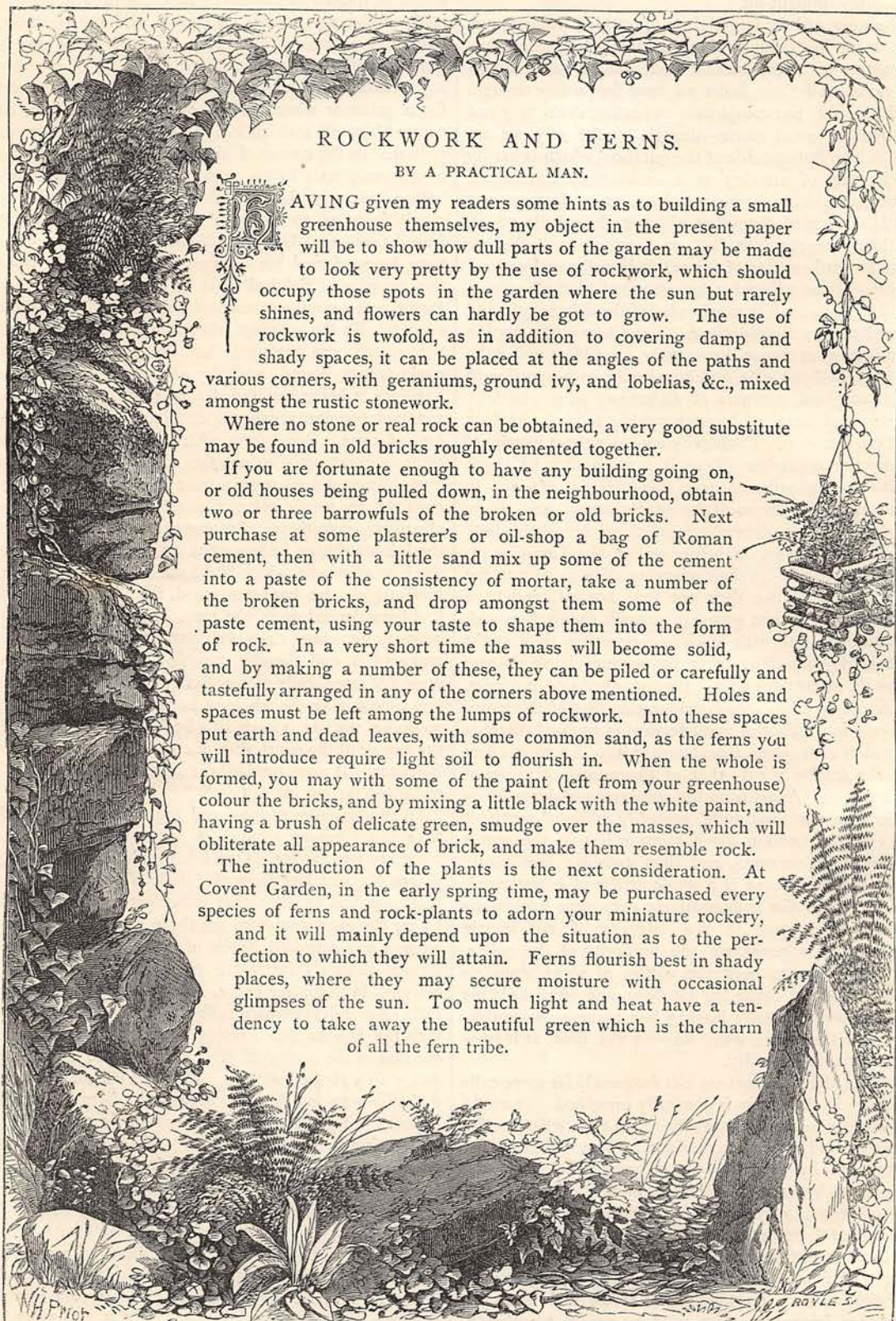
BY A PRACTICAL MAN.

HAVING given my readers some hints as to building a small greenhouse themselves, my object in the present paper will be to show how dull parts of the garden may be made to look very pretty by the use of rockwork, which should occupy those spots in the garden where the sun but rarely shines, and flowers can hardly be got to grow. The use of rockwork is twofold, as in addition to covering damp and shady spaces, it can be placed at the angles of the paths and various corners, with geraniums, ground ivy, and lobelias, &c., mixed amongst the rustic stonework.

Where no stone or real rock can be obtained, a very good substitute may be found in old bricks roughly cemented together.

If you are fortunate enough to have any building going on, or old houses being pulled down, in the neighbourhood, obtain two or three barrowfuls of the broken or old bricks. Next purchase at some plasterer's or oil-shop a bag of Roman cement, then with a little sand mix up some of the cement into a paste of the consistency of mortar, take a number of the broken bricks, and drop amongst them some of the paste cement, using your taste to shape them into the form of rock. In a very short time the mass will become solid, and by making a number of these, they can be piled or carefully and tastefully arranged in any of the corners above mentioned. Holes and spaces must be left among the lumps of rockwork. Into these spaces put earth and dead leaves, with some common sand, as the ferns you will introduce require light soil to flourish in. When the whole is formed, you may with some of the paint (left from your greenhouse) colour the bricks, and by mixing a little black with the white paint, and having a brush of delicate green, smudge over the masses, which will obliterate all appearance of brick, and make them resemble rock.

The introduction of the plants is the next consideration. At Covent Garden, in the early spring time, may be purchased every species of ferns and rock-plants to adorn your miniature rockery, and it will mainly depend upon the situation as to the perfection to which they will attain. Ferns flourish best in shady places, where they may secure moisture with occasional glimpses of the sun. Too much light and heat have a tendency to take away the beautiful green which is the charm of all the fern tribe.



The roots of old trees introduced among the stonework look very pretty ; and there are many small plants which grow among the roots of trees. In two or three corners of my own garden, which are overshadowed by ivy, I have ferns growing amongst rockwork made as described. A few fern-baskets suspended are a great feature ; the bright green leaves standing well out from the dark background behind them. It is necessary to add that, before putting the rockwork in its place, any old rubbish, stones, branches of trees, or old bricks, should be laid at the bottom for a drainage ; as nothing retards the growth and healthy character more than the lower surface being too much saturated with water.

Supposing our greenhouse has been built, it is time to direct attention to its present uses. We must now begin to think of furnishing our garden, and therefore to select our seeds and roots.

It is advisable to go to a respectable seedsman for your seeds, for much time and labour may be lost if we are not fortunate enough to obtain good seed. Mignonette, lobelias, ten-week stocks, sweet peas, golden feather, &c., may now be sown in pots, and will grow in the greenhouse if protected from frost by artificial heat. This will forward the plants, which by the beginning of May will be ready for the borders ; further directions will be given as the plants mature. The earth prepared for the seed should be sifted fine, and if you find a difficulty in this, any nurseryman in your neighbourhood would let you have potting-mould for the purpose. Where the seed is very small, such as the lobelia, fox-glove, or snap-dragon, the earth in the pot must be gently pressed to prevent the fine seeds being washed too far down, where they have but little chance of germinating, the weight of the earth being more than their tiny leaves can lift. A layer of silver sand about half-an-inch deep is admirable when the seed is small and dark, as it better enables any one to see the quantity sown. When the seeds are sown and covered with a thin layer of sandy earth, they should be watered well with a very fine rose watering-pot. A good plan is to dip them in a pail of water and flood the surface. Great attention must be paid to keeping your greenhouse warm, particularly when the seeds are beginning to show themselves above the surface of the mould.

By a little attention to the weather-glass or the appearance of the atmosphere, a frosty night may be predicted ; and whenever it is a clear, moonshiny, and starlight night during the months of January and February, a frost is sure to be the result. By a little practice I soon became so weather-wise that my lamp was a beacon to my neighbours, who knew, when they saw it lighted for the night, that a frost was certain to occur.

Time may be well occupied this month by cutting and preparing sticks to support plants, and making labels for names. A bundle of laths will be found useful. W. H. P.

