

root thick ripe rods a foot long; but the short cuttings make the best plants, and to go beyond four joints is to lose ground by taking too long steps. Always shade the cuttings, and sprinkle them frequently, so as to keep them fresh and unexhausted; and as soon as they have begun to grow fairly, place them full in the sun, that they may grow sturdy and healthy from the first. Seeing how quickly geraniums make roots, and how much handsomer the plants grow if they are in separate pots from the first, the best practice for amateurs is to pot each cutting separately in the first instance; and cuttings properly rooted now in 60-sized pots will not want a shift till next March or April, or not at all if for turning out in May, though to have such specimens as I grow they ought always to fill 48-sized pots, with only one crock and a rich compost, at the spring shifting, before they go to their places in the beds and borders.

S. H.

THE CULTIVATION OF ASPARAGUS.



HORTICULTURAL writers make it the custom to run in a pack together like so many hounds laid on one scent, and knowing of no other road to reach the game. A fine illustration of this is afforded by the current instructions on the cultivation of asparagus, which are simply the result of successive copyings for a century or two past; each separate writer pretending to give his own experience and the *latest* results of inquiry and observation, while actually copying oft-repeated directions, making no additions of new knowledge, correcting no errors, and giving not a gleam of light from his own individual intelligence. An exception must be made in favour of Mr. Earley, who, indeed, has nothing new to say on the cultivation of asparagus, but has discovered it to be so valuable a vegetable that he would have the poorest cottager devote his attention to it instead of to the "everlasting cabbage and potatoes."

As to the value of asparagus, every one must decide for himself. The man who can make money by growing it for market will justly value it, and do his utmost to grow a fine sample. The amateur who desires to derive from his garden useful additions to his daily diet will do well to think twice before devoting a bed to the production of asparagus. It is an elegant, delicate, wholesome, and delicious vegetable; but it is of the least possible use in the animal economy: its repute as a purifier of the blood and a preventive of rheumatism is founded on a fact of no value; and its repute as a nutritious vegetable is founded on fiction altogether. Its quick and peculiar action on the kidneys tends to no important results, and it contains so few of the elements of nutrition that we should remove it from the category of foods and class it with edible toys and dinner-table curiosities. Let those who love asparagus give their minds to growing it, but let no one be deceived by current notions of its value as *food* or *medicine*, for in the proper sense of those terms it is neither.

The books begin by saying that asparagus needs a very deep, sandy, highly-manured soil; and they follow with elaborate directions, all tending to render this comparatively worthless vegetable one of the most costly that can be taken into or out of the boundaries of a garden. Having grown asparagus of the finest quality and in great abundance under a great variety of circumstances, I am bound to say of the plant that it is the most accommodating in its nature, and needs but a small amount of attention to show the best behaviour and be easily understood. Three things are requisite for the production of good asparagus—a well-drained friable soil, an open sunny situation, periodical top-dressings with common salt. Before attempting to sketch out a code of asparagus culture we will briefly describe recent operations of our own, for “facts are chieftains that winna ding.”

In the spring of 1870 we sowed two rows of asparagus seed in a piece of ground occupied with raspberries, in the fashion of what we call a “stolen crop.” In the spring of 1871 we prepared two beds, each fifty feet in length by six feet wide. The ground was trenched two spits deep, and a heap of sweepings from the poultry-house, saved for the purpose, was spread over and slightly forked in. The earth was then taken out of the alleys adjoining and thrown on the beds, and they were thus roughly reduced to about five feet in width. The plants from the previous year’s sowing were carefully lifted and planted in May in rows one foot apart and the plants one foot asunder in the row, and the beds were then carefully cut to four and a-half feet in width, the crumbs from the alleys being spread over them. The beds were kept clear of weeds, and the asparagus stems were removed in the autumn, and a top-dressing put on of sweepings from the poultry-house, saved for the purpose. In March, 1872, the beds were slightly pricked over with a small fork to loosen the top crust and destroy rising weeds, and then a mixture of fifty-six pounds of salt and an equal bulk of dry earth was spread over their surface. The growth that followed was tremendous, not a weed appeared; in fact, not a weed could have lived with such a growth of asparagus to crush it. In the spring of 1873 another dressing of salt was given, and a still more vigorous growth followed. We began to cut early and left off cutting in the last week of May, taking from the beds an immense supply of fat, green asparagus of the most delicate texture and delicious flavour.

In the autumn of 1873 the plants stood six feet high, making a dense mass of herbage over the bed, and saying, as plainly as they could speak, “We want more room.” Therefore two more beds in another garden were prepared for them. For this purpose a piece of pasture on a heavy, clay-like loam was broken up. The ground was first trenched two spits deep, and a great body of vegetable refuse of the nature of coarse hay—the result of trimming up with scythe and sickle amongst long grass, and such weeds as “fat hen,” etc., etc.—was laid between the two spits. Then fifty barrow-loads of lime and plaster rubbish, mixed with an equal quantity of rotted grass mowings and grit from the rubbish-yard, was spread on the surface. The next thing was to lift and plant. When lifted, the

stools were so large that I could just span across the crowns, mine being a large, agricultural Teutonic hand. They were cut back to about three feet, and carefully planted in rows eighteen inches apart, the plants the same distance in the rows, and so regularly opposite each other as to form rows *across* the bed, for convenience of hoeing, the beds now being six feet wide. On the day of writing this (August 16), the job is just completed, and the hands are busy giving the plants a good watering, after which they will be slightly moulded up with half-rotted grass-mowings and grit from the rubbish yard. There is a great lot of surplus plants left in the old beds: we shall leave them for the present, and in due time lift them for forcing, and when we have taken their succulent shoots, they will be thrown away. In the spring of 1874 we shall have a grand supply of green asparagus as thick as the thumb of the largest-thumbed agricultural labourer. Our mode of growing asparagus, it will be seen, is scarcely more costly than the ordinary growing of parsnips and carrots; and as asparagus is altogether profitless if regarded as food, the less we invest in asparagus-beds the better, provided, of course, that we secure by some means a first-rate sample, for spindling sprays and "screw" rubbish should never be recognized as fit for admission to a Christian household.

Good old garden soil will grow asparagus well with very moderate manuring. Clay is the worst soil for the plant, and rich, well-drained sandy loam the best. It loves sand, and stones, and salt, and alkaline manures; but if the beds be of good texture, deep, well drained, and somewhat sandy, there is no occasion at all for extravagant manuring; therefore, a poor man who loves asparagus may grow it to his heart's content, in spite of the absurdly-elaborate directions of the books. It is a wild weed on the sandy and rocky shores of these islands, and therefore can "pick up a crust" in a comparatively poor country.

To raise a stock of plants, sow seed in March in drills one foot apart, and one inch deep. In the following spring transplant them to the beds, when they are growing freely, taking advantage of showery weather for the operation. Put them out a foot apart every way, unless the ground is particularly well adapted for asparagus, in which case put them eighteen inches asunder every way. In common with all other plants, asparagus will pay for manure and water where these can be provided in plenty, but if either of them are costly articles, the cultivator is advised to make his mind easy and leave his asparagus-beds to take care of themselves to a very great extent. A thin sprinkling of salt may be put on the beds once a month from February to July; but we prefer to use a heavy dressing in March, and a-done with it for the season; and we thus secure crops equal in weight and quality to those of our neighbours, who are always in a fuss and perspiration about asparagus; and, in fact, better every way than is secured by some of them. In fact, the asparagus-plant is overfed and humbugged to almost as great an extent as the grape-vine: we could not hope to say more with a view to obtain for it simple and reasonable treatment. As a rule, the best time to transplant is March and April, and seed-beds

that are to stand for a crop should, at that season, be thinned to a foot apart every way in poor or middling ground, and to fifteen to eighteen inches apart in ground known to produce strong growth. If, however, the time for spring-planting be lost, the plants may be moved with safety from the middle of July to the end of September, and dull, showery weather should be waited for; and the job, when once commenced, should be completed as carefully and quickly as possible.

In any and every case the soil should be deeply trenched and made as light and gritty as the materials available permit. If the situation is damp raise the beds above the level, and always select an open position exposed to the full sunshine, for shade is deadly to asparagus, although shelter not producing shade is beneficial, promoting, what is always desired, an early growth to compete in value with forced asparagus. Never allow the roots to be exposed to the air for any length of time, for they are succulent and thin-skinned, and soon suffer if their juices are drawn from them by evaporation. Hence it is not well to buy shop roots, for the length of time they are necessarily exposed seriously impairs their vigour to the injury of the purchaser. As the plantation is expected to stand for several years, never a foot should go on it except through sheer necessity, for if the ground becomes much consolidated the plant ceases to thrive; hence the importance of deep digging in the first instance and the need for stony and gritty substances in the staple. We have gathered the grandest asparagus ever seen from beds twenty years old; therefore it may be concluded that it will pay to do the work well in the first instance. As to cutting, the rule is to begin in the third year, and that is a good rule for a poor soil; but cutting may begin the second year on a good soil, and it should cease at the end of May in early districts, and at the end of June in late districts. The books say the cutting may be continued into July, and make no allowance for climates. On our fine old garden-ground at Stoke Newington we begin to cut at the end of March and make an end of cutting at the end of May—a run of two months. The plants then have time to make up for losses, but it would seriously impair their vigour if we were to cut until the middle of July. Besides, asparagus becomes a drug in the market when peas and cauliflowers are plentiful, and if the writer may hazard his own private opinion, asparagus is but a lollipop, whereas peas and cauliflowers are like marrow and muscle to repair the waste of the frame in the activities of life. There is yet one point to be decided, and that is the relative value of white and green asparagus. Having discussed the question with several of the first cooks in the land, men who are known by their writings as well as their high appointments, and found them all, to a man, in favour of *white* asparagus, we prefer to leave the question open, for we can only recognize as fit for the table of a rational human being *green* asparagus, and our preference for the green must be, of course, a matter of individual and perhaps vitiated taste. However, it is easy enough to produce either. If you want tough, tasteless, uneatable, white asparagus, put an extra six to twelve inches depth of fine

gritty soil over the crowns, and cut with a proper saw below the surface. If you want tender, juicy, tasty, come-again flavoured green sticks, do not mould the beds more than enough to fairly cover the crowns, let the shoots rise six inches or so above ground, and then cut with a knife level with the surface.

The simplest way to force asparagus is by bringing the heat to them, for then the roots are undisturbed, and will gain in time and size. For this practice the beds should be four feet wide, with two feet alleys between, and the beds selected for forcing should be left uncut in the *preceding* summer, that they may accumulate the strength needed to enable them to endure the trial. The first business is to determine when the first cutting is required, and the later it is wanted the better for the plants and the gardener. If you wish to cut in January, you must commence operations six weeks in advance; if in February, five weeks in advance; if early in March, four weeks in advance. The forcing consists in covering the bed with litter, and then taking a shallow spit from the alleys and throwing it equally over the litter. The alleys are then filled with hot dung, which must be raised to at least one foot above the level of the beds, and when slightly trodden must be covered with boards to shut in the heat and keep out the cold and wet. Finally, the beds should be covered with six inches depth of the same hot dung. In a mild winter the routine may be modified with a view to economy; and, as the season advances, the amount of heating material required to start a bed will become less and less. The produce of beds treated in this way is necessarily white, and, in our opinion, as unfit for eating as blanched rope-yarn; but it is valued by the poor rich people, and it will always pay the gardener to produce it.

A better quality of forced asparagus, less fat, but green, and therefore tender, and with the welcome flavour of a good sample, may be obtained by taking up the plants and forcing them in pits and frames. It is a very simple business. The plants should be taken from beds three or four years old, and planted in light soil on well-made hotbeds, or beds heated by hot-water pipes. A gentle heat suffices, and indeed the slower the forcing the better the produce. As the glass protects the plant from frost, it may enjoy light and air, except when the weather is severe, and therefore need not be much moulded up, the object being to obtain short, plump, dark-green shoots of the most tender and richly-flavoured kind, fit to "set before a king." A large, deep bed of leaves, with a sufficiency of old lights and walls of turf, or loose bricks, or stout boards set on edge with pegs to hold them, afford machinery enough for the production of the finest forced asparagus, provided only there is a strong plantation of some years' standing to begin with for the supply of stools for the purpose. As a matter of course, the gardener who has to provide for a family will take measures to insure a succession, but it would be like teaching such an one his A B C again to enter into details on the subject.

S. H.