kidney-beans in April, we may reckon as the first; then, amongst others, there will be Scorzonera and Salsify, vegetable-marrows, ridge cucumbers, broad beans, as well as the scarlet-runners. The early turnips and some few others amongst the above will be off the ground in time for another crop the same year, and to follow them, lettuce or any other salading will do to keep the ground from being idle, and will be sure to be found useful.

The culinary herbs, although trivial subjects to some cultivators, are to others of some importance, and should not, therefore, be treated as if they were of no consequence, which is sometimes the case, and then people wonder why they fail to do well. Many of them require a warm, well-drained border, and carefully transplanting every spring. For such as spearmint, fennel, and tarragon, a less favoured spot will serve; but for sage, thyme, savory, and majoram, the warm border should be given them.

## ON SPRING FLOWERS.

## BY GEORGE SMITH. NLY those who have enjoyed it can have any concep-

tion of the gratification to be derived from a wellselected, well-filled flower-garden during the months of March, April, and May. Probably, in spite of all that has been said, some of our readers are strangers to that style of gardening. I propose to pen a few notes which may be serviceable to them, especially as the season of spring flowers is near at hand. There are hundreds who, if they only knew how charming a flower-garden may be made to appear through the spring months. would not hesitate for a moment, and would cheerfully give the requisite labour to accomplish so desirable an end. According to the amount of zeal displayed, with of course a little skill, there will be a corresponding amount of pleasure insured at a time when the majority of gardens present nothing but the naked earth in the beds, and when every flower is hailed with pleasure. My own experience of spring-flower gardening is such that, although I only imperfectly worked it out, afforded much more pleasure to those for whose gratification it was done than the summer display of flowers in the same beds afterwards.

In my own case, a portion of the old soil is taken out of the beds every year, when the spring flowers are taken up, and its place supplied with fresh rich soil, which is well incorporated with the old staple. This plan must be adopted by those who wish to cultivate with success spring and summer plants in the same beds, and unless any one can do this, they must be prepared to see their summer bedders make but a poor display. One objection is, it takes a lot of labour to work up and keep the stock in good condition, especially as the principal trouble occurs at a season when the gardener is

March.

pressed with other work. But at the same time, the result to be obtained is worthy of a strong effort, and I am sure there is neither an employer nor a gardener but would strain a point to secure it, if they have any love for spring flowers, and if they only know how good a display may be made with these hardy and, as some

will say, simple subjects.

Amongst the most useful plants for spring decoration, I will first name the blue and white Forget-me-nots, as they are perfectly hardy, easy to manage, and, above all, very showy. The best way to make sure of them is to buy some strong clumps in summer, and part and plant in the kitchen-garden for next season's flowering. They should be planted in a rich soil three inches apart, and kept shaded and moist for a fortnight. They will make fine large tufts by the end of October, and as soon as the summer bedders are over, they may be removed to the beds where they are to flower, always providing that the beds have been well dug up first. It is astonishing what a nice effect these have when arranged with taste, as, for instance, one bed may be planted in lines, blue and white alternately; then another bed may have a centre of white and the remainder of blue. Then, again, the last arrangement may be reversed, with a blue centre and a white body, or the whole body of a bed may be filled with blue or white, and edged with the other colour, as the case may be. I find the best way to manage these subjects, when I raise them from seed, is not to depend upon yearly plants, but to sow the summer previously, on some outside spot, and let them flower where they were sown. I cut away the flower-stems, and divide, and plant out in August, as above advised. Plants so secured are not only stronger but they flower earlier, which is a consideration of some moment.

The Pansy must come next on the list for a really useful and easy subject to deal with for spring flowers. There is no concealing the fact that those which are called the Cliveden Pansies are the best for this purpose, and those who wish to shine in this department cannot well do without them, for their colours are so distinct that they enable any one who possesses them to effect a much better combination of colours than could be otherwise done; nevertheless, all but the more choice-named pansies will flower sufficiently early to produce a brilliant display from the beginning of April onwards; and where plants are not be had or cannot be purchased, a shilling packet of good mixed seed will serve the purpose. If it is sown thinly in July on a rich loamy soil, and kept shaded and watered in dry weather, the plants will be sufficiently advanced to transfer to the beds by the end of October. These will commence to flower, if we have mild weather, in March, and continue to do so throughout the month of May, if required, and allowed to remain.

Then comes the Daisy, either for separate bed or lines; or it may be used as edgings to some taller-growing subjects; but the colours should not be mixed. These, like most of the subjects for early flowering, require to be planted rather thickly to be effective. It is a good plan to buy a lot in flower, so as to secure brilliant

colours and keep up the stock by dividing every summer.

The different varieties of *Primroses* and *Polyanthuses* are admirably adapted for massing or in lines. Take up old plants in August and divide, choose a shady border, and plant them in rich-leaf soil, and they will have good roots by the autumn. The common single yellow, the double white, and the double lilac primroses are the best for bedding. As to polyanthuses, if seed is sown in May and grown on, they will make fine plants by the succeeding autumn, but another

year's growing in the reserve ground is good for them.

Another subject I use, and one which cannot well be dispensed with, as it not only serves to increase the variety, but its height serves to break up the otherwise even surface of the beds, as most of the other plants used are very dwarf-growing subjects; I allude to the single Wallflower. As we should aim at something like a systematic arrangement, the same as for the summer bedders, it is best to get these plants from cuttings, put in as early as they can be got in the summer, so as to secure their colours separate, which cannot be done if we depend on seedlings. By this plan we get almost a pure yellow, a blood-red, and a very dark variety, and as many different shades as are desired. I am content with the three distinct colours, and it is not desirable to grow more of them than are required, as they impoverish the ground so much. The double varieties would be preferable, but they are not so hardy as the single ones, and generally do not flower so early. At some nurseries very choice kinds may be met with, and it is well to buy a few when in flower.

The next best of early-flowering plants is the Aubrietia, and no spring garden can be said to be complete without it, for when well-established plants are put out sufficiently close together in the beds they are indeed very effective, and in ordinary seasons they will bloom from the middle of March to the middle of June. Aubrietia Campbelli is of a beautiful violet-blue, one of the best. A. deltoidea is a neat early-flowering variety of a lilac colour. I saw another last spring, called A. spathulata, very distinct. But they are all good, and worthy of more extended cultivation; they are easily increased either by division or slips, but they do not like the direct action of the sun immediately after removal. As perfectly hardy plants we have none which surpass them for spring flowering, and on dry sandy soils the variegated Aubrietia makes a splendid edging.

Two more fine subjects are Arabis alpina and A. lucida variegata, both very essential plants for early flowering. They withstand the cold weather perhaps better than any of the other subjects named.

But I must not stop here, for we have yet the Alyssums to cheer us up with their bright yellow flowers, and the best of these for early flowering, whether for beds or borders, are the common Alyssum saxatile and the variegated-leaved variety of the same species. We have also the Iberis sempervirens, which flowers at the same time, and is one of the purest white early-flowering plants we have. It is a capital companion to the alyssums, being dense and neat in habit. These should be increased from cuttings late in the spring, and be planted out one season previous to being wanted for spring decoration.

March.

Then I grow for an early bed the *Tussilago alpina*. It is not usual to find this anywhere except in shrubbery borders, but in a mass it makes a fine bed in the early spring, and it also adds variety. It is easily increased by division as soon as done flowering, when, if the smallest piece is planted out in the shade, it will make a good plant by the autumn.

## GRAPE VINES IN GROUND VINERIES.

BY GEORGE GRAY,

Head Gardener at Ewell Castle, Surrey.



N commencing the cultivation of the grape vine in the portable structures commonly known as Ground Vineries, it is necessary to consider which is the best of the numerous forms now before the public, the best sorts of grapes to plant, and the soil most suitable for insuring

a vigorous growth.

Much depends upon the character of the structures; for, unless they are made in a manner that will admit of the vines receiving the necessary attention without difficulty, it is very certain that, in the majority of cases, the vines will suffer from neglect. The ground vinery which has the greatest advantages is unquestionably that manufactured by Messrs. W. S. Boulton & Co., of Norwich. It is portable in the truest sense of the word, for it can be moved from place to place without difficulty; and, when shifted from one part of the garden to the other, it can be set to work again instantly. Added to this, the glass is fixed in sashes several feet in length, and air can be admitted, or the glass removed for the vines to be syringed or otherwise attended to, without the trouble attendant on the removal of loose sheets of glass. The sides are of wood, but if they are placed on a course of bricks, they will remain sound for a large number of years. Of those made in earthenware and glass, that manufactured by Mr. B. Looker, of the Norbiton Potteries, Kingston-on-Thames, is undoubtedly the best; for, whilst substantial in character, it is light in appearance, and the glass is easily removed, although not, perhaps, quite so readily as in Boulton's. The most suitable width is either three feet or four feet, as two rods can then be trained side by side. In ground vineries of lesser width, there will not be room for more than one rod. The length of each vinery must be determined by local circumstances, such as the amount of money to be expended, and the space at disposal; but, as a rule, vineries twenty or thirty feet in length will be the most desirable. Each vine, whether trained to a single or double rod, will require about ten feet run of vinery; and, therefore, one vine should be planted to every ten feet length. In planting the smallest of the two sizes above mentioned, put a vine at each end; and in the case of the largest size, put one at each end, and one twenty feet from