

over the glass and the sides of the frame left quite unprotected. The safest course, and one that can be highly recommended is, to pack a liberal quantity of litter against the wall about the first week in December, and allow it to remain until the end of February. On the appearance of frost the lights should be shut down rather early in the afternoon, and the glass covered before the moisture on the underside commences to freeze.

A very large number of tender plants will not receive material injury if they are frozen, provided they are thawed before being exposed to the light. Therefore if the frost finds its way into the frames, let the covering remain on, and the lights closed until the plants are thawed again, and then uncover by removing a portion of the protecting material at a time.

In the case of frames filled with reputed hardy plants, such as pansies, pentstemons, and auriculas, a moderately light covering will suffice, excepting in very severe weather: its chief value consists in protecting the plants from the sun until they are thawed. It will therefore be seen that in severe weather there should be no hurry in removing the protecting materials in the morning.

A most essential point in the winter management of the cold pit is to remove all decaying leaves or plants with promptitude to prevent those in a healthy state being injured by coming in contact with them.

RIPE GRAPES AT CHRISTMAS.

BY J. W. MEREDITH.



WITHIN a comparatively short period it was supposed that to have a dish of good grapes during the Christmas festivities it was necessary to have what is designated an "early" vinery, and to start the vines into growth in the autumn, and push them on through the months of October, November, and December, with artificial heat. This it need hardly be said could be only done at an immense cost; the grapes at that season were therefore placed quite beyond the reach of those with limited means, for, independent of the cost of fuel, a very considerable amount of skill is necessary to ensure satisfactory results. Now the practice has changed, and instead of forcing sorts which attain early maturity, those which can be kept for a considerable period after they are ripe are grown instead.

The advantage of growing late instead of early grapes is immense, for they are produced with less difficulty and expense, and are moreover of a much finer flavour; they are in fact as easily produced as an ordinary crop of Sweetwater or Black Hamburgs, for autumn use. It therefore appears to me that it would be well for those who have only limited accommodation for grape-growing to consider whether it would not be to their advantage to grow grapes that may be kept until the supplies of out-door fruit, such as peaches, nectarines, and plums, are exhausted, instead of those which have to be

consumed at the same time as these fruits. I think it would. As an example of the higher value of grapes at Christmas, it may be mentioned that in the market they are worth three times the price of similar samples sold three months previously.

In the production of late grapes it is essential to plant sorts that will keep in good condition for a considerable period. One of the best of these is the *Kempsey Alicante*, a very handsome grape, of fine flavour. It is not quite so hardy as the Black Hamburg, and requires the assistance of a little artificial heat in dull and damp weather during the summer. *Lady Downe's Seedling* is also good for late keeping, but it does not set its berries quite so well as the preceding, and frequently suffers severely from "scalding," and the branches have the appearance of having had boiling water poured over them. This is in most instances due to insufficient ventilation, and by increasing the ventilation, and admitting air earlier in the day than usual, as soon as the first berry is attacked, very little harm will be done. *Madresfield Court Black Muscat* and *Mrs. Pince's Muscat* are also very good grapes in skilful hands, but they cannot be recommended to the notice of the amateur cultivator. The best white grape for late keeping is the *Muscat of Alexandria*, but it requires a high temperature, and a very considerable amount of skill is necessary to bring it to perfection. It cannot be grown with either of the above-mentioned varieties, and the amateur will act wisely in cultivating black sorts only.

The month of November presents a most favourable opportunity for planting the vines, for they can be more readily obtained from the nurseries than when in full growth in the spring. They moreover can be planted with a greater degree of certainty of their doing well. The borders should be well drained, and consist chiefly of mellow turfy loam. The general management of the vines will be the same as of those producing crops for autumn use, and therefore it is unnecessary to speak of it in detail. Although the crop will not be required until Christmas, it must be quite ripe in September, for after that period there will not be sufficient sunheat to develop the proper flavour and colour, and moreover, imperfectly ripened samples will not keep so well as those which have attained perfect maturity. To keep the grapes in good condition through the winter, a cool temperature and a dry atmosphere are essential. No plants must be kept in the house, for the moisture arising from them will do an immense amount of mischief. The bunches should after the end of October be carefully examined about once a week, and all berries showing traces of decay removed, to prevent the others being injured by them. After a period of damp weather, especially if the roof is not water-tight, a little fire during the day will be useful in assisting to dispel the dampness, but it is necessary to guard against the use of too much fire-heat, for if the temperature is kept too high the grapes will be converted into raisins, and rendered comparatively worthless.

In cases where a few canes of a late sort are planted in a house with Black Hamburgs, and the house is required for bedding or other plants, the bunches may be kept in water in a cool dark room.

Fill with water as many soda-water or other small bottles as there are bunches, and suspend them in a room or cupboard, then cut the bunches with a portion of the shoot, and insert the end of the latter in the bottle. They can be kept in this manner for several months.

GARDEN GUIDE FOR NOVEMBER.

PROCEED with lifting and storing root crops as fast as the weather and the state of the soil will permit. Also clear all quarters of stumps of cabbages, cauliflowers, and other exhausted crops and manure, and then dig them up, leaving the soil very rough on the surface, or throw it up into ridges. It is a very good time to prepare the ground for seakale beds. The roots should not be planted till the spring. The ground must be deeply trenched and liberally manured, and the manure thoroughly incorporated with the soil. Begin forcing now by first placing the seakale pots over as many stools as are to be started, and fill the spaces between and over the pots with a mixture of stable dung that has been once turned, with leaves, straw, and other litter, beating it firm as you proceed, and leaving the whole smooth and tidy nine inches above the top of the pots. Where only small quantities of seakale are required, it may be forced very conveniently and cleanly in pots. Pot the roots singly in 24-sized pots, in a mixture of leaf-mould, rotten dung, and sandy loam, equal parts. Place the pots on the top of a brick flue or on a gentle hotbed, the bottom-heat not to exceed 60°. Invert over each pot another empty pot, stopping the hole of each with a piece of flat tile, over which press a lump of clay. About three-fourths of the complaints that reach us of the misbehaviour of fruit trees, and the failure of vegetable crops, and the unsatisfactory blooming of roses and many other things, have one common origin—the want of drainage. We cannot here enter into the details of the subject; but as this is as good a time as any to drain land that requires it, we again remind our readers that good drainage promotes the warmth and fertility of the soil; and, on the other hand, a water-logged soil is almost poisonous to every kind of plants that come under the care of gardeners.

FRUIT GARDEN.—Currants and gooseberries should now be lifted if required, as the next year's crop will be less jeopardized by getting them early to the places in which they are to fruit. Fork in a good dressing of manure between the trees in old plantations. Put in cuttings of choice sorts; the cuttings to be straight ripe shoots of this year, and all the lower buds removed, so as to prevent the throwing up of suckers. Fruit trees to be planted as soon as possible; manure not to be used unless the ground is in a poor condition, and then a little fresh soil should be used with it if possible. In planting, keep all roots near the surface. Stake as soon as planted, to prevent rocking by the wind, and at the same time prune. Raspberries to have the old canes cut away, the new canes thinned