Rules Relating to Hyacinths Grown in Glasses.

These rules may be learnt in five minutes, and if followed, will, I am persuaded, be attended with satisfactory results.

1. If you choose your own bulbs, look for weight as well as size; be sure also that the base of the bulb is sound.
2. Use the single kinds only, because they are earlier, hardier, and generally preferable for glasses.
3. Set the bulb in the glass so that the lower end is almost, but not quite, in contact with the water.
4. Use rain or pond-water.
5. Do not change the water, but keep a small lump of charcoal at the bottom of the glass.
6. Fill up the glasses with water as the level sinks by the feeding of the roots, and by evaporation.
7. When the bulb is placed, put the glass in a cool, dark cupboard, or in any place where light is excluded, there to remain for about six weeks. The roots feed more freely in the dark.
8. When the roots are freely developed, and the flower-spike is pushing into life (which will be in about six weeks), remove by degrees to full light and air.
9. The more light and air given from the time the flowers show colour, the shorter will be the leaves and spike, and the brighter the colours of the flowers. —*W. Paul's Lecture on the Hyacinth.*

Tuberose Culture.

Put each bulb singly into the smallest pot it will go into, using the very richest soil, and plunge them into bottom heat, giving no water until they show signs of growth. As soon as these small pots are filled with roots, shift into a larger size; still using the richest soil, re-plunge into bottom heat, and encourage by watering when necessary, and when the flower stems have grown three or four feet in height, they may be set in the warmest part of the greenhouse to develop their flowers. The waxy beauty and delicious scent of these flowers amply repay any pains bestowed on their production.—*Gardeners' Magazine.*

Grape Vine Culture.

By W S, of Woburn

PRELIMINARY.

In The Canada Farmer, numbers 5 and 6 (15th March and 1st April, 1864), a few observations were given on the "Culture and Management of the Grape," the most delicious of all fruits, to which we again refer our readers. We have nothing to qualify in these remarks, but there are many parties, and the number is increasing, who are anxious to *try* grape culture, who may have had little or no previous experience, and to such a few additional observations, somewhat more in detail, with the aid of illustrative engravings, may be useful. We accordingly purpose again traversing the entire field of grape cultivation, and shall endeavour clearly to explain the *principle* of the thing in as few words as may unmistakably convey our meaning.

There is scarcely another fruit which produces so good results from very little skill or attention, and yet so magnificent under the *best* management and cultivation. And when it is borne in mind that the vine comes into bearing the second or third year, and into full productiveness by the fourth or fifth, hardly any other fruit crop can compare with it. It is true that, here in Canada (we are, perhaps, a little too far north), we must remember that we are in the 44th parallel of latitude, at any rate, that even the hardiest sorts will be all the better to be laid down and protected during the winter, but that with this precaution most productive crops of grapes can be obtained. We appeal to facts, shewing what is actually being done in this way in more or less extended proportions, which may anywhere be readily repeated on any scale that may be desired. The show of open-air-grown grapes at the recent Provincial Exhibition at Hamilton, has been on all hands admitted to have been the largest and finest yet exhibited in Canada.

"The show of grapes," says the *Globe*, "was the largest we have ever had at any Provincial Fair, and of a quality which afforded very gratifying evidence that increasing attention is being paid to the culture of the vine, for which we are now finding out that the climate and soil of Canada are specially adapted. The vine loves the rich soils which abound in this country, and our short, hot summers suit very well those varieties of grapes which ripen rapidly. The experience of our vine cultivators fully bears out the conclusion arrived at by a Committee of the House of Assembly last session, that by proper open-air culture a most abundant grape harvest, of the best quality, could be gathered in Canada, and we trust that, year by year, the natural advantages of our country in this respect will be turned to increasing account." Let any of our readers, at the proper season, visit the small vineyard of Mr. Bevan, the cooper, at Yorkville, and he will find ample proof of all we have before stated. We have always found this gentleman courteous and ready to furnish every information, and, we doubt not, so will any one who may call upon him. Mr. Bevan has only half an acre of land, or thereabouts, altogether. On this his house, workshops, and other buildings are erected, the remaining portion only being devoted to garden and vineyard purposes. Some twelve years ago he planted a few grape vines. Finding their culture a congenial occupation, he gradually increased his stock until his whole available space is now occupied with vines. Mr Bevan's garden has a western aspect, not, perhaps, so well drained as might be desirable and profitable, but well sheltered on all sides, and many varieties of our native hardy grape here grow most luxuriantly, producing abundant results. Every season he makes large quantities of wine, a really excellent article, for which, he says, he always finds a ready sale, besides saving and using considerable quantities for the table. He has likewise a small glass-house, in which he cultivates the leading foreign varieties in admirable perfection. An average estimate of Mr. Bevan's returns warrants the conclusion that an acre of vineyard will, after paying all expenses, yield a clear average annual profit of from $800 to $1,000. An acre will grow about one thousand vines, which (the very finest sorts) could probably be purchased in that quantity, the ground prepared, fenced and planted, for about $100. Now, making full allowance for the labour necessary over three or four years, when there would be no return, we think there can hardly be any speculation surer or likelier to be profitable.

To begin at the beginning: we shall first advert to the soil, preparation thereof, and the aspect or location of the vineyard; and, when we speak of the vineyard, the same principles apply to a plot of half-a-dozen, or even a single vine.

SOIL, PREPARATION, LOCATION OR ASPECT.

A black, carbonaceous loam is the best soil, but any ordinary land suitable for a good crop of wheat will answer perfectly well. It will always, however, be proper to examine particularly into the texture of the soil in which it is proposed to plant the grape vine. There should be some sand, some clay, some gravel, and some limestone in it. If there be too little sand or gravelly limestone, then the soil will become too clayey and cold, or if there be too much gravel and sand, then vegetation is repressed. It has been remarked that American soils are generally deficient in what European vineyard men prize so highly—gypsum or plaster. If deficient, this must be supplied by proper manures. A very strong, stiff clay should be avoided. It must be naturally dry, or made so by thorough drainage. The least degree of stagnant water is very injurious, and a very wet soil quite fatal to the grape vine. A rising ground with a southern or south-western aspect is the best, but the vine should neither be planted on the crest of a hill nor in the bottom of a valley. The hill is too much exposed to tearing winds, and the valley to damps, frosts, and mildews. There should be a full exposure to the sun during the heat of the day, and above all there must be thorough shelter. A high board fence should surround the vines, at least at the north and north-west. A *live* fence, for the construction of which there are many admirable materials, would be by far the best. There is the Norway spruce (*abies excelsa*), the hemlock (*canadensis*), the American holly (*ilex opaca*,) the American arbor vitæ (*thuja occidentalis*), the buck thorn (*rhamnus catharticus*), the honey locust (*gleditchia triacanthos*), and, shall we say? the white willow (*salix alba*); any of which in four or five years would form an excellent wind-break, and at the same time protect the grounds effectually from the inroads of either quadrupeds or bipeds. Then the soil must be in a fair state of cultivation, or receive a moderate manuring. Lime, phosphates, plaster, or well rotted barn-yard manure—any or all of them. But there is not the least necessity for *heavy manuring* before planting. It is quite sufficient when the vines come into bearing, to work the manure into the soil in the shape of a mulching, year after year. The preparation of the soil should, however, be very *thorough*; ploughing, harrowing, rolling, raking, breaking up in any and every way until it is thoroughly pulverised—if it can be made as fine and light as bolted flour, so much the better. This is the secret of abundant crops, and is much more valuable than either deep trenching or heavy manuring. Indeed, both these items, so much insisted on by various writers, which by their expensiveness deter so many from attempting the business at all, are not only useless, but decidedly injurious. A depth of from twelve to eighteen inches is amply sufficient. The summer and fall seasons are best for these operations.

SEASON TO PLANT.

If very carefully done by experienced hands we should, ourselves, prefer the *fall*; but perhaps there is less danger of failure by *spring* planting; only if it is much the better plan to procure the best two year old plants from the nursery just before the hard frosts set in, in the fall, cutting them down to two or three eyes or buds, and denuding the roots of about a third of their proportions, and then thoroughly securing them by *heeling in*, so as to be at hand the moment the season will permit planting in the spring. Vines two years old are the best; they should never be purchased or moved after attaining this age. The grape vine will scarcely ever grow good fruit, or fruit in any quantity if *moved* after this. It is, under ordinary circumstances, tenacious of life, and may be propagated and cultivated in a variety of ways, but after three years old it cannot be moved without irreparable injury. Whether, therefore, it be determined to plant in the fall or in the spring, the vines should be procured in the fall. Have ready by the time they arrive a trench, capable of holding them all, set four inches apart and about eight inches deep

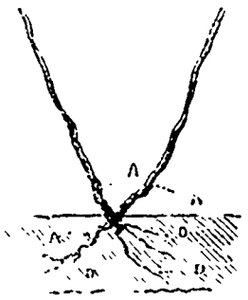

Fig. 1.

Fig. 1 shews the plant as received from the nursery. A A A A are the points at which it is to be pruned off both wood and roots. Fig. 2 shews the vine as it appears when so pruned, ready to heel-in or to plant. Each plant so trimmed must be neatly packed in sandy earth at the bottom of the trench, covering it

Fig. 2.

carefully with the hand, spreading out the roots in their natural order, and filling in sand between them, so that they do not touch one another. Then cover the roots about an inch in depth; take another vine, trim it in the same way, set it close to and partially above the other, putting soil between them until the whole are in and covered. Then fill in soil, raising a neat mound, and covering every part to a depth of at least eight inches. Tidy off the whole, so that the water will run off, and none stand round about; the vines are now safe for the winter, no matter what the weather, and at hand the moment they are wanted in the spring.

☞ Grapes have ripened well in the open air at Quebec this year.

Vintage of 1864 in France.—Foreign papers say that no thing can be more magnificent than the vintage this year in all parts of France. In the wine districts there is a superabundance of grapes. The proprietors of vineyards are actually puzzled to know what to do, their usual supply of casks having long been filled, and the coopers, although at work day and night, being utterly unable to supply the demand.

Keeping Parsley for Use During Winter.—Housekeepers who value this for seasoning and for ornamenting dishes, can have it all winter with very little trouble. Take up a stock of roots and set them in a box of earth. This may be kept in a light cellar, wash-room, or any place where it will not freeze, and give a good supply. A barrel or keg with auger holes bored at intervals may be filled with roots and earth, the crowns of the plants being placed at the holes, and the barrel or keg filled with earth. This being set in the green-house or even in the kitchen, will give a supply of parsley and make a very pleasant green ornament. The plants left in the bed are to be covered with cedar boughs or some other similar protection.—*Am. Ag.*