

company of your children to assist in gathering the fruit. But if a large apple should fall 10 or 15 feet from some high limb, and strike one of the little urchins on the head, it might leave him senseless on the ground, besides there is the loss of all such apples being bruised and unfit for market. But the advantage in favor of low trees is not only in the protecting of their bodies and in trimming, but also in the fruit being protected from being blown off by the winds, the convenience and ease of gathering the apples, bringing them in the barrel sound and fit for market, in keeping the plough away from tearing the upper and best roots, and the whittle trees from rubbing off the bark from the side of the trees, the trees bearing fairer fruit, and in making the labour much less in scraping and washing their trunks. Mr. Beattie recommends the bodies to be 3 or 4 feet, but I want the limbs to branch out from the ground, then snow covers up their short bodies in the winter and protects them from the frost and sun, one of the most important points. Your committee has informed the public on one very important point, in publishing the hardy kinds, all others should be abandoned. One half of the apple trees published in the American catalogue should never cross the water, or be planted this side of Toronto. for when so many fail it has a tendency to discourage men from planting. We must search for more hardy varieties, by testing new kinds that have been introduced. I shall plant out 50 or more new kinds this spring, and if I get one or two out of that number that proves hardy, I shall be well paid for my trouble. Without doubt there are more hardy kinds, and we must find them.

R. B. WERDEN.

Picton, Feb. 27th, 1832.

### On the Culture of the Vine in the Open Air.

[Read before the Hamilton Horticultural Club, by D. A. McNabb, Esq., March 4th, 1862.]

MR. PRESIDENT: SIR.—Your Secretary has assigned to me, the production of an Essay on the cultivation of the Vine "in the open air."

So important a subject he should have placed in the hands of a member more competent, and numbering, as our club does, so many practical gardeners, this would have been an easy task; such a course would also have brought out the fullest information, information that would convince any one having unoccupied ground 12 feet square, that it is his own fault or the time is not far distant when he can sit down under his own vine and enjoy the fruit thereof.

You (Mr. President) may be assured that it has puzzled my wits considering what course to pursue in framing such an essay—that it might be plain, simple, and to the point. The conclusion come to, is to give you the

course I annually pursue, convinced that course when followed by others will produce the same results, making Western Canada what it ought to be, a grape producing country.

Select a piece of ground having a pleasant aspect, and sometime during summer trench it 2 feet deep, (if not let it be properly drained) trenching in as much topsoil as can be procured from any old pasture, fully avoiding animal manures of all kind.

Prepare a lot of stalks 6 feet long & number according to the quantity of vines to be planted, commence 4 feet from the corner, insert the stakes 18 inches in the ground, 15 feet between each stake and 15 feet between each row. In September or first week in October, having obtained good strong vines (one year old) commence planting. I am going to say cut your layers back to 3 feet, but your nurseryman will do that for you if you purchase the best varieties. Take 4 inches of soil around each stake in a circle equal to the vine's roots to be planted, vine on the south side of the stake, care extending the main or larger roots in straight lines from the stake, arranging the smaller roots in their natural position, with a trowel in the hand, commence at the extreme end of the root, cover them with the earth taken from the circle and from the alleys, take sufficient care to cover the roots with 4 inches of soil, treading it firmly with the foot, which will finish the planting. I would here urge the importance of spending some little time even in moving each root and rootlet in its natural position; if this is carefully done, not a vine in one hundred but will take root and establish itself before winter sets in. Now remains to be done but to protect the vines with evergreen branches, and where such cannot be obtained, corn stalks or any clean litter will be suitable.

**Second Season.** If the vines have been covered with any kind of litter liable to decay, they should be examined shortly after the first mild weather, taking such decayed litter away and re-covering the vines with dry straw. During this season little more is to be done more than keeping down weeds and when ground is an object many kinds of vegetables or root crops may be put in, done a circle 3 feet in diameter around each vine should on no account be dug.

About the middle of May the vines should be examined, and where more than one vine has started pinch back the second to one, and the one next the ground rub clean.

During summer as the vines grow, trim back the later branches to one leaf, trim the vines up to the stakes. About the middle of July mulch the ground around each vine with fresh stable manure 3 inches deep from a circle around each vine 3 feet in diameter.