

well drained it is perfect. The vine soon exhausts the soil within its reach, and in consequence becomes barren. To prevent this, let a quantity of fermented stable manure be yearly dug in as far as the roots extend; washing occasionally with liquid manure, such as soap suds, drainings of the manure heap, &c., is of great service while the fruit is swelling.

The treatment of vines under glass and in open ground, is essentially different—I am writing of the latter only, and for the benefit of amateurs, and not men who have made the business their profession. The first requisite is to secure a perfectly open sunny exposure, south side of a close board fence—it may be assumed that no atmosphere can be too bright or sunny,—next, the vines should be kept within moderate bounds, they are vigorous in growth, and the indulgent cultivator is apt to allow them to cover a large space. This is an error. At first they produce enormous crops, but soon become unfruitful and useless.

I hope I may be excused for taking the liberty of here referring to the grapes grown last season in the garden of John Cameron, Esq., of the Commercial Bank, in this city. This is done without his knowledge. The plants were the Isabella and Sweet Water, and were under the care of Mr. William Gordon, seedsman. The crop was abundant, and the fruit so fine as to excite universal admiration. To have seen them would prove a strange stimulus, to all who have the opportunity, to imitate so worthy an example.

The modes of training the vine are numerous and each method has its own advocates. The following, termed the *upright* mode of training, and *renewal* method of pruning, is simple and easily understood. It is followed generally in England, and in many parts of The United States. Having procured your plants from a nursery, allow two or three shoots to grow unresisted for the first year; in the succeeding fall or early in spring, cut the shoots back to three eyes, allow the strongest of these to form two leading shoots the following season—pinching off all others; at the end of the summer bring down these two shoots to a horizontal position, and fasten them to a bottom rail, about three inches from the surface of the ground,

shortening them into six feet on each side of the plant. From these horizontal branches, whose position is permanent, train three or four others, on each side, to the height of seven or eight feet, in a straight or fan-shaped direction. The following year these upright shoots will bear fruit at every bud, and whilst thus performing *their* duty, train others between them in a similar way, to bear fruit next year. After the grapes are removed, cut out the branches that bore, leaving the lowest bud, and an inch of wood beyond it. In this way proceed from year to year. Downing says, that this method, if not producing the most abundant crop, invariably yields the finest and largest fruit. The frequent cutting out of the wood, and the vigorous growth of young healthy shoots, are also sure preventatives of the mildew, a disease which, with other modes of treatment, frequently proves fatal.

This communication being altogether practical, I have endeavoured to be as plain and succinct as possible. I will conclude, at this time, by observing, that winter protection, though not absolutely necessary, is yet advisable for greater security. This is done easily by untieing all the branches, about the middle of November, having previously pruned them, so as to keep them within the required dimensions. Bring them down to the surface of the ground in a straight line, on either side of the root, and fasten them down with hooked pegs; cover them with soil to the depth of six or seven inches, using no straw or other litter, which is the sure harbinger of mice and other vermin. Do not let fine weather tempt you to uncover them before the middle of the following April.

Finally, as the fruit develops itself, cut off the ends of the shoots bearing the branches, leaving one bud beyond each bunch. As soon as the berries are the size of peas they should be thinned out with a pair of sissors. The extent of this thinning depends on the thickness of the berries. Occasionally I have cut three out of every four. A general rule is to allow plenty of room for each berry; they should not press in any way on each other, and want to be examined about every ten days.

In conclusion, when trees have been planted in a thorough manner, every one should be tied