

and as high flavored as when grown on the common apple stock; at what age they generally begin to bear; how much fruit on an average is produced by dwarf apple trees at four years old; how much at eight. Also, whether they are adapted to all soils, or can be grown only on some particular soils; whether they require any special treatment, and if so, what it is; and whether they have been found to fail under any circumstances, and if so, what they were.

Many gentlemen doubtless have had more or less experience with dwarf apple trees on Paradise stock. Will they please send it to you, Mr. Editor, and in addition to Mr. Werden, you can call on Mr. C. Arnold, of Paris, County of Brant, who has had considerable experience with these dwarfs, under circumstances calculated to test their hardiness and general value for Canada.

D. W. BEADLE.

St. Catharines Nurseries, March 1861.

Orchards on Steep Hill-sides.

Well do I remember when I was a boy, getting many a bump in the ribs, from the plough handle while working our steep hillsides for rye and buckwheat, and not with the best of feelings towards our forefathers for clearing the timber off. I am frequently asked which is the best place to plant an orchard. My advice is to take the best land. I would always prefer a sheltered situation, behind a hill or wood. Steep hillsides are generally objected to for planting an apple orchard; but I think a steep hillside is not the worst place by any means. My hillside orchard is doing quite as well as any I have. It is in the form of a half circle, with a south-eastern exposure. I plant my trees in a half circle to suit the hill, in order to make it more pleasant to work, and also to keep it from washing. I think that trees can be placed much closer on a steep hillside than elsewhere to advantage. My method of cultivation has been to plough down from the upper side to within four or five feet of the next row. I plough the first furrow close to the row with one horse; I then plough the balance with two horses.

In four or five ploughings it will form a terrace that answers a very good purpose. I had also planted a row of nursery trees with each row of orchard trees, which did very well. By merely working from the upper side, the spaces are now level, or rather inclining a little back, which causes it to retain moisture much longer than it did before it was ploughed into terraces. The spaces between the terraces I use for strawberries, blackberries, seed-beds, etc. It is also a first rate place to raise early vegetables.

The side-hill used to be a regular eye-sore, but now it is the prettiest part of my farm. I think we can make no better use of our steep hillsides than to plant them with trees, if it were for no-

thing else than for the appearance. The grass growing on the terraces we used, when the trees were young, for mulching; drawing mellow ground on them from the upper side.—C. B. OTT in *Gardener's Monthly*.

Rhubarb.

The different kinds of rhubarb are raised from seed, and increased by that means, or by dividing the roots; the latter is preferable for increase, as there is a much greater advantage in getting good strong plants in one half the time they could be had from seed. If raised from seed, sow in sixty-sized pots, very thinly, in a mixture of earth consisting of one half leaf mould and one-half rich loamy earth; place the pots in a cucumber frame, or hot-house, until the plants make their appearance, which will be in a very short time, provided the seed is sown in March. As soon as the plants have attained the height of one inch, let them be thinned out to a single plant, and in two or three days move the pot into the green house, or other cool place, to harden the plants. As soon as the pots begin to be full of roots, which will be the case in two or three weeks, let the plants be moved into pots a size larger, and in two or three weeks time the plants may be placed in the rows where they are to remain,

If increased by dividing the roots, take care that there is a bud on each part you intend to plant; let one of those buds be placed in the centre of each pot, and as soon as they begin to be filled with roots, &c., treat them the same as the seedlings. In making the ground or rows ready for planting, throw out the earth two feet in breadth, and to the depth of twenty inches; let this be filled up with equal parts leaf mould, rich loamy earth, the soil which is thrown out of the trench, if of a moderate quality, and one part of good rotten dung, to which add a small quantity of sharp sand; let all these be incorporated together. Fill up the trenches sufficiently high to allow for setting. When the earth has sunk down, turn the plants out of the pot into the middle of the trench, three feet apart in the row, and if a double row, let them be four feet row from row. If the above instructions be properly attended to, rhubarb of a first rate quality will be produced. The only management required afterwards is to keep the rows clear of weeds, and every autumn to fork the ground over to the depth of four or five inches, covering the same with a good coat of rotten manure; take care not to injure the crowns in forking. As soon as any of the plants begin to run up for flowering, let the stem be immediately cut off, which will be the means of keeping the plants in a much stronger growing state; for, when they are allowed to retain the flowering spikes, it weakens the leaf stalks very much.—RHELM GIGANTEUM, *St. Albans, in Gardener's Monthly Magazine*.