

scraper, then wash with the solution hereafter recommended—under drain thoroughly—cultivate the ground in potatoes or other green crop, for a few years, with a good dressing of manure, annually, and the trees that are of inferior fruit and have healthy stalks, graft them with the best sorts of Market Apples. What we need most for our provision for the future, is such a selection as will give a varied and excellent supply through the winter and spring. Long keeping apples may be sent safely to any part of Europe, and pay better than wheat. We need not fear to plant too many of these, for a large supply will create large facilities for their distant conveyance, and open large markets for their sale.

Perhaps what I have now advanced with regard to future supply should be left to be discussed by the club. I shall now proceed to lay before you my views on the following subjects, in the hope that it will at least create a discussion in the club that will be useful to the country:

- 1st. The best situation and soil for an orchard.
- 2nd. Preparing the ground, &c.
- 3rd. Planting, distance, and mulching.
- 4th. Pruning, scraping and cleaning.
- 5th. Manuring, and after management.
- 6th. Diseases, &c.
- 7th. Cost and profit of an orchard.

First, then, Mr. Barry says, the situation and soil of an orchard, with regard to exposure or aspect, requires but little consideration, where spring frosts do not prevail. The main difficulties to guard against are the prevailing high winds, from the west and north, that injure the blossoms and blow off the fruit before it is ripe. If possible a situation should be chosen where a natural hill or ridge protects and breaks the force of destructive storms; but where no such obstacles exist, a belt or border of rapidly growing trees, such as broad leaved poplar, maples, and abeles, should be planted that they may grow up and form a protection, by the time the trees have come into bearing. I agree with Mr. Barry in this view, but I prefer for shelter, evergreens, such as White Pine and Hemlock; White Cedar also makes a beautiful screen, takes up very little room, and may be clipped like a hedge. Shelter is of the very highest importance to the fruit-grower, and no garden or orchard should be without it. Some argue that fruit trees ought to be planted in valleys. I maintain and say it from experience that fruit trees should not be planted in low ground, except on very sandy flats, where it can be drained easily. There are many instances that we read of in the neighboring States of orchards bearing regular crops on high hills, when on low ground they seldom bear a good crop. Mr. Thomas, in his fruit Culturist says, he could mention multitudes of cases where peach orchards were killed to the ground by the winter on low land, and never missed a crop on high land within 500 feet of the same place. He cites as a reason that vegetation is easier excited in spring than in more elevated and colder situations, and that frosts always fall more heavily on low than on high grounds. This will show you, coming from such high authority as J. J. Thomas, that hills and banks unfit for other cultivation, may be turned into orchard grounds, and my own observation convinces me that he is right. The best crop of fruit that I have seen in the country I saw in an orchard on the top of the Hamilton Mountain, when on the flats east of the town, where there are large orchards, the crops are very thin. Experience has taught cultivators that high, dry, and moderately rich soil will produce the best crops.

SOIL.

It is only necessary here to point out the best soils adapted to the different classes of fruit trees. There are soils of certain texture, such as sandy loam, with a clay sandy subsoil, in which, by proper management, all our hardy fruits may be grown to perfection side by side. Our country abounds in such soils, and others somewhat different in character, but equally fit for fruit trees when well managed. On the other hand there are soils wholly unfit for fruit trees of any kind, such as peaty or mucky and damp, cold, spongy soils. For a pear and apple orchard, a dry, deep, substantial soil, between sandy and clay loam is the best; on such we see the healthiest trees and the fairest fruit.—Plums succeed best on a stiff clay loam. The cherry, peach, nectarine, and apricot require a light, dry, warm soil, and will not succeed well on any other. Where the proper ingredients for fruit trees are not contained in the soil, it should be added in the shape of manure or compost. I observed the other day some very healthy fruit trees on the Caledon Hills, where the soil was a clay loam and nearly covered with lime stone.