

In preparing the ground for an orchard, every field or piece of ground whether for garden or orchard requires levelling more or less. It adds to the appearance of the ground, and the surface water goes off quickly. The next thing to be done is to under-drain it thoroughly, if the ground requires it, with brick tile, stone or pine rails. Draining is not necessary in all soils, but only in such as are heavy clay, with a hard subsoil, or in wet spongy grounds. Undrained grounds, again, are not fit for trees of any kind; for wet in winter, has a very injurious effect on the roots of trees, whether small or large, I know this from long experience to my cost. After levelling and draining is finished, draw out your manure, 80 cart loads to an acre, beginning on the far side, and spread it only as it is ploughed under. The ground should be at least twice ploughed with a common and subsoil plough. The best way to do this, I find, is to start two teams, one in the common plough, and one in the subsoil, the one following the other, twice in each furrow. In this way, there is no stopping to change the horses, from one plough to the other, which is a great saving of time, and you get 18 to 20 inches depth. Two teams will do half an acre in a day, and the work will be equal to two spit trenching. After ploughing is done, the harrowing and levelling the ground afterwards completes the whole operation, and it can then be laid out, in whatever form the proprietor may wish, for a garden, fruit orchard, or lawn, and if the work has been thoroughly done according to the directions here given, I have no hesitation in saying it will be in fit condition to grow any kind of crop. On ground of limited dimensions the spade may be used in place of the plough.

PLANTING AN ORCHARD.

Having procured the trees, dig a trench and lay them in, covering their roots to prevent them from drying, and take them from this trench according as they are planted. I am aware that some people plant trees and kill them while they are planting them, by leaving the trees exposed, perhaps a whole day to the hot sun. Proceed now to stake out the ground in regular distances, taking care to lay out the plot at right angles, because if this is not done the trees will not line in the different directions. I think it is best to plant in squares, as this gives the best facilities for working the land where oxen and horses are used. If a garden line is not convenient that will reach across the whole plot, provide stakes and set them on the ground in squares of from 25 to 30 feet, where the trees are to be planted, as these are more easily arranged than the trees themselves. Where the ground is prepared the holes need not be dug any larger or deeper than just sufficient to spread the roots out in their natural position, and should be just deep enough to allow the tree to stand as it did in the nursery. The process of planting is very simple and may be done rapidly, only keeping in view that every root and fibre must be spread out with the hand, so that each may meet the soil. Then let one person hold the tree while the other is filling in the soil; surface soil made fine should first be put in among the roots, and then gently shake the tree that no vacancies be left, treading it gently and firmly by the foot. Previous to planting, trim the ends of the roots with a sharp knife, cutting off all bruised roots: this will facilitate the formation of new roots and prevent the decay of the parts injured. Fruit trees of all sorts should be headed back at the time of planting, that is cutting off the half or more of last year's growth. Planting should never be done when the land is wet, as the soil is sure to become baked and hard round the root. After the planting is done it is necessary to mulch all the trees. There is no method of preserving newly planted trees like this; it is also true that no treatment is becoming so universally popular as this, and even well established trees would be greatly the better for a dressing of this kind. It seems just suited to our hot, sunny climate, preserving the moisture, preventing the growth of weeds, and supplying manure. Mulching consists in covering the ground about the trees, to a greater or less distance, according to size of the plant to be treated, with litter or long manure, and where neither is to be had, short straw or hay will do, spread over the roots to the thickness of four inches, and covering a space of not less than three feet in diameter. This will do more to preserve the trees from draught and promote their support than any other course I know of; it is also cheap, safe, and effectual, and no watering will be necessary. I have strongly recommended mulching, because I know very few understand the value of it. Every tree over five or six feet high ought to be staked and fastened to the stake by a straw or hay rope, and be careful to clear away suckets from about the roots as soon as they appear.

If the ground is cultivated in green crops for some years afterwards all the better for the trees, but if not worked with great care I would recommend the whole to be seeded