

Regarding the tools used in the above operations, there are several orchard plows facilitating the plowing close to the trees, but the ordinary plow with a set over beam is recommended, and the surface tillage can be done satisfactorily by means of the various disc and smoothing harrows. Even the cultivator or spring-tooth harrow may be used when their teeth are so arranged as not to go deeper than say four inches.

CROPPING BETWEEN THE ROWS

For the first few years vegetable or small fruits, such as strawberries, may be grown between the rows of trees. The advantages of such a practice depend largely upon the judgment of the grower. He must decide what kind of

crops will suit his purpose best and what length of time they are going to occupy the ground. Some crops take up the water and food that the trees need, and many would interfere with the care of the orchard. In general, cropping between the rows is profitable, provided following points are observed: 1st, Three feet of space must be left all around the young planted trees and this space be increased by a foot or so every year as the trees grow. 2nd, The crops should be a hoed crop or crops, care of which benefits the trees as well and in no way impoverish the soil. 3rd, This practice of cropping should be discontinued after eight or ten years and all the space given up to the trees.

Peach Culture

J. W. Smith & Sons, Winona

PEACHES require a well drained soil. If the land is rolling and well drained, naturally it is not necessary to underdrain. Put in a hoe crop, such as potatoes, tomatoes, or roots of some kind, which will leave the ground in good shape. The following spring work your ground up well, then mark your field out by commencing at the base of the field, stretch a wire or cord along the

grown the way you want them. I prefer to have the main stem nipped back eighteen inches above ground, and not trimmed like a whip, but about ten inches, as a tree makes a better collar and root growth when their limbs are left on.

PLANTING

In planting, we use a "T," putting the trees down two inches deeper than they were in the nursery, with two men

to dig the holes and one man to look after the "T" and trim the roots. If the roots are long or bruised or broken, cut off with a clean slanting cut. Be sure to dig the holes large enough. Place your tree with the heaviest side leaning against prevailing wind from five to seven degrees. Shovel in the earth with the trimmer, holding the tree in place, and tramping

down the earth as it is thrown in, leave two or three shovelful of earth lying loose around the tree to keep the ground from baking or drying out.

I prefer to trim the trees after they are planted, for when the ground is ready we don't want the trees lying around. When all are planted we go along and trim back to four limbs where possible, with two buds to the limb. Have the limbs well distributed over the tree and never leave the limbs so that they form a crutch.

The best varieties to plant are Yellow St. John, Leamington, Ely, Crawford, Champion, New Prolific, Elberta, Yellow Rare Ripe, Niagara, Lemon Free, Beers Smock and Smock.

We prefer a cultivated hoe crop of potatoes, tomatoes, or a crop of strawberries, but leave a good space between berries and trees for cultivation. After second year have the orchard so it can be worked both ways and keep the ground in as good condition as it would be for a hoe crop. When the trees begin to bear give lots of manure and ashes alternately, but not together. In the spring, as soon as it is dry enough, work away from trees with a disk or shallow ploughing. Harrow or disk every week or ten days until the last of July, when the earth is worked back for winter. We get the trees ready for winter before picking comes on, with the exception of water furrows, and banking around each tree about six inches deep and two feet all around the trunk of trees, which is done any spare time between picking and after the fruit is off. Oats make a good cover crop, as it grows well under the trees and makes a good growth, which holds the leaves and is easily ploughed down in the spring.

PRUNING

In trimming the young orchard, cut out all limbs that cross and thin out centres so as to throw the growth to the sides and not in the top. In mid summer thin out all limbs that cross cut back the centre main limbs to one half to throw the growth to outside limbs, which lets in the sun to ripen the wood and make the buds stronger for winter. We do not trim our bearing trees until after February, when the severe weather is past. If buds are badly hurt we do not thin much, just head back enough to let in sun and air. If buds are good, thin out and head back so as to get shape to tree and size to fruit.

I have been spraying for the past twenty years with good results. I have fourteen hundred Duchess pear trees which I sprayed three times and controlled the spot perfectly, while one tree that was missed was black with the spot, while with apples, plums, cherries and grapes it was the same story—perfect fruit when sprayed, almost unsalable when spraying was neglected.—A. W. Peart, Burlington, Ont.

I had an old orchard of Greenings, which of late years had been so wormy and scaly that I had decided to pull them out, in fact had cut out about eighty trees, but thorough spraying is bringing back early conditions, in fact, one tree one hundred years old produced twenty barrels of perfect fruit, while a five acre orchard seventeen years old in rough land that could not be sprayed did not produce a single barrel of good apples. Lime-sulphur has given the apple trees in the Niagara district a new lease of life.—L. L. Woolverton, Grimsby.



A Model Peach Orchard

This properly pruned and well cultivated Peach Orchard is the property of Messrs J. W. Smith & Sons, Winona. See accompanying article for description.

end, then use a pole the distance you want your trees apart, and be very exact, marking off the ground and line at the same time, going across the base of the field and up the side and across the other end, coming back to starting point measure off the other side. Then with a man at each end of your line, working towards each other staking out, moving each time the distance you want your trees apart, until you have your field marked out. I consider twenty feet each way a good distance for planting, or twenty-five by eighteen feet.

When getting your trees, buy from some reliable man near by, and order a year before setting out; have them