

two bushels, but be worth two dollars or more per bushel; and while the small peaches could only be shipped at a loss, the larger ones would yield a handsome profit.

A large per cent. of the edible part of a peach is composed of water; hence it is the formation of the seed that exhausts the vitality of the tree. The perfecting of the seeds of such an immense number of peaches will frequently exhaust the vitality of the tree, so that it cannot produce another crop for years, and this is one reason why peach trees allowed to overbear are usually short-lived. Peaches should always be thinned before the seed begins to harden, while you can still run a pin through them without meeting any obstruction from the seed. If any show marks of having been stung, or are in any way faulty, they should be taken off and destroyed.

We should leave the peaches as equally distributed as possible, from four to six inches apart, all over the tree. The cost of thinning should not be considered, as if they were left on they must be picked when ripe, and it certainly will cost less to take them off while small, to say nothing of the vastly increased value of those that are left to fully develop.

Remember that overbearing is the "besetting sin" of the peach tree, and that thinning *must* be done if you would grow the finest fruit. If we were asked to give the approximate number of peaches that should be allowed to mature on a tree, we would say, for a three-year-old tree, about 150; for a four-year old, 250; for a five-year-old, 400; but seldom over 600 for a tree of any age.

#### CULTIVATION.

It is just as reasonable to expect a good crop of corn without the same care. During the first two or three years some low hoed crop, such as peas or melons, may be grown in the orchard, but they should not be planted too near the trees, and the space around the young trees should not be neglected, but should be kept clear of weeds and grass and the surface mellow.

The cultivation of young orchards should be suspended about the 1st to 15th of August each year, in order that the young wood may mature

before winter. Cultivation should be kept up in the orchard as long as it lives. It should commence in the spring, as soon as the blossoms open, when the orchard should be carefully plowed, being careful not to plow so deep as to injure the roots.

For subsequent cultivation, on lands not too rough or stony, the Acme or Cutaway harrow may be used, thus saving much time and expense. It will, however, usually be necessary to use a one-horse cultivator directly in the row and next to the trees.

We need scarcely caution the orchardist that great care should be exercised in the work of cultivating not to break the branches or in any way mutilate the trees. Cultivation should be kept up as often as necessary to maintain the surface in good condition until in August.

#### FERTILIZING.

Of the three essential constituents of plant food—nitrogen, phosphoric acid and potash—nitrogen is of the greatest value in promoting growth and forming wood. This fact indicates that manures or fertilizers rich in nitrogen should be used during the first years of growth in the young orchard.

Of this class of fertilizers, we might mention well-decomposed barnyard or stable manure and cottonseed-meal, which should be applied early in the season, to be turned under at the first spring plowing.

When planting no manure should ever be put in direct contact with the roots, but in some soils a few handfuls of fine bone may be mixed in the soil about the roots. When the peach tree comes into bearing, phosphoric acid and potash are necessary to the proper development of size, beauty and flavor of the peach. These elements can be supplied by fine ground bone and muriate of potash, or hardwood ashes. Many orchards become unprofitable because they are not properly fertilized. One great reason for the failure of so many orchards is because they are starved. After the trees come into bearing, they have to perform the double function of developing wood growth and perfect-