

As to the heading of trees, Professor E. R. Lake, Horticulturist of the Oregon Experimental Station, Corvallis, expresses himself as follows:—

"A tree," he says, "should not be over a year old when planted in an orchard; it will then have a number of buds all along the stem. One of these, about nine inches from the ground, should be selected and allowed to grow; about nine inches above, and about a third of the way round the stem, allow the next to grow, and so on, always keeping a leader and allowing branches to grow not less than nine inches apart. The tree will at first present a rather awkward appearance, but it soon gets over that, for as the limbs grow out it assumes a symmetrical appearance."

The following cuts and explanatory remarks are furnished by Professor Lake:—

"I am sending you a drawing from nature of a one-year-old tree (Fig. 1) as we prefer it for usual plantings; Fig. 2, as the tree appears at the end of a year after transplanting; and Fig. 3 as it is pruned for the formation of the permanent head.

"Some advantage could have been gained in growth had all the other branches been pinched back during the first season out, rather than permitting them to grow and then at the end of the season cutting out all except the ones left to form the head. A and B in Fig. 3 represent the places where branches will issue from the leader next year, and so on."

The pruning must, of course, be regulated by circumstances, the peculiarities of the variety and other conditions being taken into consideration. Above all things, Mr. Lake says, avoid cutting out the leaders; there is no part of the question of pruning that is so pernicious as the too common practice of cutting out the centre, thus forcing the tree to grow in an unnatural manner and inducing the formation of forks. A tree grown in this manner will, when it comes into bearing or from the effects of storms, be almost certain to split asunder at the fork and be ruined. The objects of low heading, as recommended, are two-fold, viz., to avoid, in a great measure, the full effects of storms, and the ease with which the fruit can be picked. No ladders being necessary, girls are able to gather the fruit from the ground, thus avoiding the injury to trees from the use of ladders and the rough usage fruit is subjected to through being handled in that way. Furthermore, he says, experience has proved that girls make better pickers than men—they handle the fruit with more delicacy and care, thus preventing a large percentage of bruised fruit. When asked how cultivation could be done in an orchard with low-heading trees, he said that by the use of spreaders, disc harrows and acme harrows or scarifiers could be made to till the soil beneath the trees, and yet permit the horses to travel safely away from them, even though the tops are broad and low. With low heads, well trained, cultivation can be done as thoroughly as when the trees are headed high. On all grounds, therefore, Mr. Lake contends that experience has proved that the system he recommends is by far the most practical, and gives better results in every way. I must acknowledge, after having heard Mr. Lake explain his views and his reasons, I feel that my ideas regarding high pruning should in a great measure be modified, and I, therefore, take great pleasure in adding this chapter to my former remarks in Bulletin No. 12.