

CARE AND MANAGEMENT OF ORCHARDS.

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Bulletin No. 12 dealt principally with the preliminary work in starting commercial orchards, and I now propose to deal with the care and management of orchards after they are fairly under way. Before proceeding further, I will again refer to an unaccountable error which occurred on page 3 of Bulletin 12, where, in advising the selection of a site, I am made to say that western and southern exposures are not adapted for orchards; this should read eastern and southern. And further on a north-eastern exposure is recommended; this should read a north-western exposure. The context shows the intention, but the errors are nevertheless probably very perplexing.

CULTIVATION.

Possibly the most potent factor in the success of an orchard is the proper cultivation of the soil, keeping it free of weeds and plant growth generally, and by this means having the surface in a perfect state of tilth and thus keeping the trees healthy and strong, so that they are better able to withstand the attacks of diseases and insect pests. It is an undeniable fact that new diseases are constantly finding their way into our orchards, in spite of the utmost vigilance of the Board of Horticulture, and the best way of resisting and eradicating these diseases is keeping the trees healthy; thorough cultivation is a better specific than any after-methods—prevention is always better than cure. As a matter of course, some soils naturally require more cultivation than others, but all soils should be kept in a state of cultivation, either by means of shallow ploughing, disc harrowing, or by use of the cultivator until the period of full maturity of fruit and foliage is attained, when cultivation may be discontinued until the following season. Referring to the subject of cultivation of the soil, L. H. Bailey says in Bulletin 19, Cornell University:—

"A finely divided, mellow, friable soil is more productive than a hard and lumpy one of the same chemical composition, because it holds and retains more moisture; holds more air; presents greater surface to the roots; promotes nitrification; hastens the decomposition of the mineral elements; has less variable extremes of temperature; allows a better root hold to the plant. In all these ways and others the mellowness of the soil renders the plant food more available, and affords a congenial and comfortable place in which the plant may grow."

There is no harm—in fact, it might be done with profit—during the first few years in the life of an orchard to raise hoed crops between the trees, but as soon as the trees begin to send their roots any distance and the foliage shades the land, it is not advisable to continue the practice. Seeding down with clover and ploughing in, when the trees are several years old, is recommended for the purpose of adding humus and fertility to the soil. Grasses and grains are on no account permissible, and the practice so common in British Columbia to attempt to get crops of hay out of the same land which