

round us, and if we are satisfied to omit the new and better ways of culture, we shall surely be driven to the wall. The old couplets "A little farm well tilled," etc., are not without their significance at this day, or it may be,

"The Man With the Hoe,"

is brought to mind. The past summer has been of a nature to show the good results of thorough and constant cultivation. During the hot dry summer months those orchardists who kept the soil thoroughly worked, had the satisfaction of seeing their fruits come to proper maturity, while those who had so much land under cultivation that they could not get the required work done, lost heavily from the different fruits dropping in their early stages. A question that has been a long time debated among experienced orchardists, is, whether sod or mellow culture is better for an orchard. Many orchards have borne regular crops of fruit for many years with an unbroken sod. This only proves the land is unusually rich. As a rule, this is not the case. But in dry seasons, it may be difficult for trees in sod to obtain sufficient water to carry a large crop through to perfection. My experience is that the growth must not be checked; we must not expect that a tree planted in the grass, with simply a small portion of the sod worked around it, will make the same growth that the same tree would if planted in cultivated soil. I would say, a tree planted in cultivated soil will make three times more growth than one planted in the sod. Seeding down an orchard for a few years in some cases may prove beneficial, but the majority of orchards contradict this experience. Cultivation should begin

Early in the Spring

as soon as the ground is fit for work, keeping the surface earth harrowed

once every two weeks, or oftener, especially in dry weather, till the latter part of July, when it should be discontinued to give the tree time to mature its wood before the coming hard frosts. Of the many causes of failure in apple culture, the most common is lack of cultivation. The first value of tillage is to furnish the plants with food which the soil contains. I have found that when the orchard is in an unthrifty condition, so that the leaves are of a light green or yellowish tint, and ripen early, and the fruit is scant and poor, cultivation is the surest and speediest cure, and will accomplish what pruning and manure will utterly fail in doing without it. Cultivation of the soil so exposes it to the action of the air as to make available the plant food which is already there in store. In 1896 my orchard was in the condition above described. It had been seeded down and left to the ravages of insects for several years, and the trees were robbed of their vitality. In the summer I broke up thoroughly one half of it, applied fertilizers, sprayed and pruned it carefully, while the other half was pruned, sprayed and manured, but not cultivated. The same treatment was continued during 1897, and the result was plain enough to the most casual observer. It was here that I learned the value of tillage by killing the couch grass in the orchard and with this object in view I cultivated often during the season.

In 1896, from 50 trees of Nonpareils, 9 barrels were picked, while in 1899, 200 were got from the same trees. Now what does this shew? Was the soil exhausted? I think not. There is no question but that the soil was depleted, to a certain extent, of its fertility. There are thousands of pounds of nitrogen, phosphoric acid and potash in every acre of our land and it is better to handle the soil so as to get this