

had almost their whole crop strewed upon the ground in the autumn by wind-storms, know how to appreciate the favoring protection of a dense woods of deciduous, fir and evergreen trees. This cannot be quickly remedied, but a windbreak of a double row of Norway spruce trees will, in twenty years, be of inestimable value in this respect.

2. Lack of Cultivation.

The second cause of failure, and one of the most common, is lack of cultivation. Somehow or other, the idea has got abroad that the apple orchard needs no cultivation. True, there is no growth of wood, the fruit is small, and imperfect of its kind; but it never seems to occur to the owner that the trees would grow any better for being cultivated; or if he does believe in it, he does not sufficiently value his apple crop, to give it the same attention as he would his corn or potatoes. There is need of a general waking up on this question. I must confess to having been once of this opinion myself, but I have been converted. I have found that where 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; and, besides, has a most important influence in counteracting the serious drouths to which our country is of late so subject.

One of my orchards which had been planted some twenty-five years, was in the condition above described. It had been left seeded down for about ten years, and had become unthrifty and unfruitful. In the summer of 1886 I broke up thoroughly one-half of it, applied wood ashes and pruned it carefully; while the other half was pruned and manured, but not cultivated. The same treatment was continued during 1887, and the result was plain enough to the most casual observer. The cultivated portion resisted the drouth of that year completely. Its dark green foliage was a remarkable contrast to the light sickly green of the other part, and more important still, the cultivated trees were laden to the very ground with such a load of fine Baldwins, Greenings and Golden Russets, were not equalled in any other orchard on my fruit farm.

3. Lack of Manure.

Who ever thinks of giving his apple orchard an annual dressing of manure? All the manure is put on the field crops; no farmer would expect to grow fine potatoes, or a paying crop of grain, without a heavy coat of manure; but the apple orchard must shift for itself, without either cultivation or manure; and then if it does not yield a paying crop it is condemned as worthless, and ought to be cut down because it does not pay. Is it the fault of the orchard, or of the orchardist? Why should it be expected to do what no other farm crop could possibly do?