

cash or extra labor; *it simply means doing the very best we can with the means at our disposal*

Good corn or wheat land (which can be found on any farm), plowed deep and followed by a sub-soil plow, if possible, is the first essential. Give the land a liberal manuring on the surface after plowing, with raw ground bone and wood-ashes, if they are to be had, if not, muriate of potash; from 400 to 600 pounds of the potash, and from 1,200 to 2,000 pounds of bone per acre, the quantity depending somewhat upon the natural fertility of the soil. Whatever manure is used it should be thoroughly harrowed in, to prepare the ground for planting, which should be done in early Fall or very early Spring. Plant only the most approved varieties, young, thrifty, well-rooted plants, propagated with care from Pedigree Stock (never using plants from old and wornout fruiting beds); and give good, clean culture at all times, remembering that it is much cheaper and easier to hoe a field three times a month than it is once.

Use a mulch of some sort, to give winter protection and to keep ground moist and fruit clean in Summer, and irrigation, if possible. The foregoing general rules, only fairly well carried out, will in most cases, give "big berries and lots of them," at a less cost than a small amount of inferior fruit can be grown for under a less thorough system of culture.—*J. H. Hale in Wine and Fruit Grower.*

Scientific.

THE APPLE SCAB.

(*Fusicladium dendriticum*.)

It is high time that we in Canada were awake to the importance of combating this dangerous scourge of our apple orchards. Every year this fungus

is gaining ground upon us, and threatens the total ruin of the apple crop, which has been the pride of Western Ontario. New York State, Michigan and Wisconsin are equally affected, and a Prof. Arthur in New York, and a Prof. Trelease in Wisconsin, is earnestly studying out its nature, and the best possible remedies; who in Canada will befriend our Horticulturists by careful experiment.

One of the most interesting reports we have received is one kindly sent us by Mr. Frazer S. Crawford, of Adelaide, South Australia, on the opportune subject of the Fusicladium. The name Fusicladium is applied by scientists to that genus of the family of Black Moulds, known generally in Canada as the apple scab, pear scab, and apple leaf blight. We have known it in Canada since about the year 1865, but we then paid little attention to it, supposing that it was only a temporary evil.

KINDS AFFECTED.

It began with the *Fall Pippin*, our very best fall apple, and in a few years so ruined the fruit that it was utterly worthless for shipping. Not only that, but the trees themselves seem injured by it, and have ceased to bear their usual crops of fruit.

Since that time the *Fameuse*, *Early Harvest*, *Rambo*, and *Newtown Pippin*, have shared the same fate. Even in the northern sections, as appears from Mr. Croil's paper read at the Chatham meeting, where the *Fameuse* has been so fair and clean, the same sad story reaches us.

The *Spitzenburg* and *Baldwin*, though less disfigured by the spot, have borne very scant crops for three or four years past, and what little they have yielded has been small and misshapen.

Some four or five years ago we found some *Greenings* slightly affected. Now, the fruit on those trees is almost as bad as that of the *Fall Pippin*.