

iron was used early, before the leafing out, one pound to thirty gallons; and again, weaker, after the foliage was out. The season proved unfavorable to the development of the fungus, being a warm, dry spring. Still, the disease showed itself on such trees as were much subject to the disease, proving that the wash had but little effect.

Professor Riley's kerosene and sour milk emulsion was also tried partly as a scale exterminator. It proved likewise of little use as a cure for any of the complaints. The following season, spring of 1885, substantially the same compound, used the succeeding season so successfully, was used again, but applied cold. It produced favorable result, but not enough to be called successful. A great deal of scabby fruit could be found, the spring also being very dry, and the comparatively healthy looking fruit we attributed to this favorable condition. The season of 1886 brought out the fungus in full force again, this time showing itself all over the experimental orchard.

#### SUCCESSFUL REMEDY.

The sulphide of soda with whale oil soap prepared as follows: "Dissolve thirty pounds whale oil soap (eighty per cent. soap at the most costing five cents per pound,) in sixty gallons of water, by heating the two thoroughly. Boil three pounds of lye (American concentrated lye is what we have used) with six pounds of sulphur and a couple of gallons of water. When thoroughly dissolved it is a dark brown liquid (chemically sulphide of soda.) Mix the two, the soap and the sulphide of soda, well, and allow them to boil for about half an hour, then add about ninety gallons of water to the mixture, and it is ready for use." This was applied warm at the temperature of 190° F. in the barrel from which it was sprayed. The remedy this time proved a decided success, and with the exception of the variety first attacked years ago, only such fruit as had not been covered with the solution was affected in the least. Such varieties as for years, and even last year, a favorable season, had suffered so severely that they were almost cracked to pieces, were perfectly smooth.

Sulphur mechanically mixed with soap had also been tried several times before in the shape of the so called codlin moth wash, but its effect when used in this locality had been nothing. Reports from sections with a warmer summer temperature show better results. It seems, therefore, that in a cool climate, when sulphur simply is used