

year. Professor Panton promptly published an excellent bulletin on the Scale, and otherwise has done good work by giving the fruit growers of the province information as well as by showing how important it was to have it attended to at once, has helped to stamp out the pest.

PERNICIOUS NATURE OF THE SAN JOSÉ SCALE.

Statements have appeared in the newspapers that the San José Scale is merely an ordinarily injurious insect similar to many others we have had to deal with in the past. I might as well deny this plainly at once. All those who know anything of the subject acknowledge that this is the most serious pest that we as entomologists have ever had to study. It has increased and spread with enormous rapidity since its introduction into the States east of the Rocky Mountains, and has been the cause of great loss. It is probable that the San José Scale is not a native of America, although it was first discovered at San José, California, in 1870, and by 1880 it had done so much harm that it was described by the United States Entomologist as *Aspidiotus perniciosus*, the Pernicious Scale, on account of its injuries and the great difficulty of treating it. By the end of another decade the Scale had spread all over California and through Washington Territory and Oregon, and had done a great deal of harm. Indeed, the harm was so great that the Los Angeles Horticultural Commission reported in 1890 that "if this pest be not promptly destroyed it will utterly ruin the fruit industry of this country." Now, it was only discovered as an injurious pest in the orchards of the Eastern States in 1893—this is 1898—that is five years, and of course it has not been at work yet this year. Since its detection as a fruit pest in the orchards of the Eastern States, therefore, it is simply a history of four years. In that time, it has spread through the whole of the important fruit-growing States of the United States. It is not confined to one State, but is found in every fruit-growing State that touches our borders, and from which in the past we have imported a great deal of nursery stock. I do not know for certain about the State of Maine, but in every other State of those mentioned it has been detected, and it is known that wherever it occurs it has done a great deal of harm.

Some recent writers in newspapers have said that the entomologists are making a great hullabaloo about this insect, and they assert that there are no actual instances we can give as to its ravages. I will give you, gentlemen of the Committee, one instance of several. Although I have not seen this orchard, I have seen others in a similar condition, close to it and in the same State. This is a photograph of an orchard which contained 28,000 bearing trees which were so injured in three years by the San José Scale that half of them were dead at the time the photograph was taken, and the other half have since had to be cut down and burned. A full grown bearing peach tree may be valued at from \$5 to \$15, if not attacked by this insect. Now, if we value these trees as worth \$10, you will see the large amount of money which has been actually lost in one orchard. In the States of Maryland, Virginia, New Jersey, and many other States the San José Scale is doing extensive injury at the present time.

LEGISLATION.

In regard to our Government's recent legislation looking to the control and exclusion of the San José Scale, I believe that it was both wise and necessary. Every care was taken that all information concerning the insect should be gathered together, and the Honourable the Minister of Agriculture hesitated a whole year before putting the Act through Parliament. It was said by some to be done precipitately and forced through Parliament in a hurry; but this was not the case. We considered it carefully and the wideawake nurserymen and fruit growers of