

ravages of the San Jose Scale. There are three thousand acres in that island—almost one continuous peach orchard, so that there was no more favorable spot for the spread of the scale. At the beginning of the experiments the owners had taken out, near the centre of the district, about three thousand trees before they began to try this whale oil soap experiment. Through the carefulness, persuasiveness and persistency of Mr. Owen, one of Prof. Webster's pupils, the fruit-men in that district were forced, in spite of themselves, to spray.

DR FLETCHER: How?

PROF. LOCHHEAD: Some of them did not believe in the soap treatment the first season, but when they saw the improvement in the condition of their neighbors' trees they sprayed the next year. Some of these men, when they saw the great improvement that had been done, said that the San Jose Scale had been a blessing in disguise. I need not speak further along this line, but shall briefly state four very important conclusions that I have been forced to draw from the work of this San Jose Scale Commission.

First. The scale cannot be exterminated from the orchards of Ontario by the efforts of either Government or people.

Second. Any radical method that aims at extermination should be discontinued. I mean by radical method the destruction of every tree that is infested.

Third. From our experience in Ontario, and what I saw in Maryland in the spring, I conclude that the scale is not quite so destructive in Ontario as it is in Maryland. We have not had it so long here as the orchardists of Maryland have had it. We have had it in Ontario seven or eight years, and although there has been quite a number of trees killed, not more than one or two whole orchards have been killed outright; while in Maryland one hundred acre, and two hundred acre, and three hundred acre peach orchards have been killed outright. At present we are not in a position to say whether the scale will act in that way here or not, but from what we saw in Kingsville, and from what has been seen in some other parts, it is possible it may become as destructive. I am inclined to believe that the climatic conditions will reduce to some extent the full reproductive capacity of the scale. I do not think it is possible that the scale will develop as rapidly in this Ontario climate as it will in the south in Maryland.

MR. DEARNESS: It is likely to have one generation less.

PROF. LOCHHEAD: There is one peculiar feature which inspectors have observed, and it is this, that the scale seems to gather force for two or three years without spreading, and then all at once, like a plague, it breaks out and spreads rapidly.

Fourth. The fourth conclusion is, that the scale can be held in check by the proper soap solution properly administered. I need not rehearse what Prof. Webster has said. He does not believe in letting the orchard men do this; it must be done by a corps of men employed by a Government Superintendent appointed for carrying on this work. Prof. Webster has given plenty of evidence of carelessness on the part of orchardmen, and the Ontario orchardmen are no exception to the Ohio men in this respect. I must repeat that the scale is a most pernicious one, and to say that it is no worse than the oyster shell bark-louse, or some other pests, is an absurd position to take. Its life-history and powers of reproduction are altogether different from the other pests. It is true that the San Jose Scale is confined to the plums, pears, peaches and apples, but it has the power of reproducing on other plants, so that I cannot emphasize too strongly the fact that this scale is a most pernicious one; and I do not think we should try to give out to the public that it is a pest at all overestimated. We must maintain emphatically that it has not been overestimated if we want to preserve the orchards. The scale is undoubtedly taking to our Province kindly. We find it in sections in the Lake Erie district; how far north of that district there has been no chance to determine. It has also been found at Belleville, and a few miles back of Belleville. Belleville has a far colder climate than this district.

This Society should do all in its power to inform the public with regard to the presence of this pest, and I would suggest that every public school inspector in the province should