

Agriculture and Colonization.

Perhaps some of the Members living in Western Ontario know by sight the effects of the work of this insect without really being aware that the pest is at work in their orchards. Early in the spring, where the insect is at work, a large quantity of gum exudes from the trees and falls in a mass below the peach trees. In some places two or three quarts will be found to have fallen beneath infested peach trees. This is the result of the work of this minute insect which is only about one-sixteenth of an inch long. By working in the bark it injures the forming wood, and the tree in its efforts to cover up the injury pours forth large quantities of gum. Under these circumstances the trees soon become exhausted, for it is not possible for the tree to lose all this amount of nourishment which may be called prepared food required for the next year's growth. The chief result then of the work of this insect is to weaken the tree by taking away the nourishment required for the use of the tree during the growing season.

By Mr. Carpenter :

Q. I have just been using washing soda and soft soap. How much Paris green do you put in the mixture?—A. I will give you the exact proportions used by Mr. Fisher—Five pounds of washing soda, three quarts of soft soap, water to make six gallons and then enough lime to show what trees have been treated. That will, of course, make the mixture thicker and also enable us to identify the trees which have been washed. Add to the foregoing three table spoonfuls of Paris green and one ounce of carbolic acid. I think probably that the carbolic acid is the most important part of the mixture. The whole should be applied with a whitewash brush. The carbolic acid acts as a deterrent, preventing the insects from alighting to lay their eggs when flying through the trees, for this beetle flies readily from tree to tree. It was committing great injuries and drastic measures were required to prevent its spreading. Many experiments were tried with different substances, and, at the end of last year, Mr. Fisher found that all the trees treated as above were greatly benefited and the attacks of the bark-borers upon those trees had almost ceased altogether.

By Mr. Carpenter :

Q. Do you recommend the application of this remedy when the leaves are coming out?—A. The first wash should be applied before that. The insect comes out early in the spring and immediately sets to work ; as the injury begins early the application should therefore be made early in the spring, so as to be preventive.

By Mr. McGregor :

Q. Do you spray the mixture or apply with a brush?—A. It is applied with a whitewash brush.

Q. Does the insect go from limb to limb?—A. This insect works mostly on the rough bark of the trunk, but also occasionally on the larger limbs and even on young trees. There was an impression prevalent that it only attacked old and dying trees, but that is a mistake.

By Mr. Carpenter :

Q. The mixture is quickly put on?—A. Yes ; very easily.

The New York Plum-Scale.—Another insect which caused a good deal of injury in Canada last year is known as the New York Plum-Scale. The attention of fruit growers generally has been drawn to it because it has increased so rapidly in some of our orchards. Luckily for us in Canada, we have found that it is badly attacked by a natural parasite which has kept it down, but not sufficient to check it entirely so as to prevent loss. Thanks to the good work of Mr. Slingerland, of the New York State Agricultural College, it has been shown that by the application of kerosene emulsion this insect can be destroyed. In Canada, Mr. Fisher, of Queenston, and Mr. William Orr, of Fruitland, adopted this method of fighting it and found last autumn that they had stopped its ravages. In this way it is shown that we had a practical remedy for this insect also.