were able to lay up a good supply were probably not much stripped, and these might be safely tapped; but where there is little sugar this will all be required for the trees and taking even the small percentage of about five per cent which is usually drawn off when trees are tapped, might be very injurious to them.

By Mr. Burnett:

Q. Would you recommend scraping the old bark off apple trees?

A. Yes certainly it would do no harm and would deprive some insects of a place to pass the winter.

Q. And washing the trees?

A. Yes, as good a thing as any is simply to white wash the trees.

Q. With lime?

A. Yes, but that is an idea that some people do not like. In some parts of England it is a regular practice to whitewash the trees, and often too this is done for nothing but the neat and clean appearance; but it has also the effect of killing the eggs of many insects. In answer to your question as to scraping trees, it would be very useful against the Codling Moth which passes the winter as a chrysalis in crevices in the bark. Whitewashing the trunks also prevents moss growing on the trees.

## ENEMIES OF FOREST TREES.

There are a few more insects I intend to speak of to-day but I will merely refer to them briefly in case any member wishes to ask questions about them. In the West the spruces were injured last year by a sawfly like the one which destroys currant bushes here. In addition to this considerable injury was done by the maggots of a gall gnat which attacked the ash-leaved maples in the streets of Winnipeg, disfiguring the leaves with fleshy swellings. I am of the opinion that spraying the trees with whale oil soap in spring will prevent the female flies from laying their eggs on the leaves.

## THE NEGUND PLANT-LOUSE

has been treated very satisfactorily in some places with whale-oil soap and kerosene emulsion, the standard remedies for all of the plant-lice. The aspen poplars in Manitoba were stripped entirely of their leaves in many localities by a small beetle shaped somewhat like the Colorado Beetle and belonging to the same family. This is the Pallid Aspen Beetle. It has a green head and fawn-colored wing cases. It may be treated satisfactorily with Paris green and water where this mixture can be applied.

By the Chairman:

Q. There was a severeattack here in Ottawa and vicinity upon elm trees which bled sofreely it was like tur on the sidewalks and grounds. Was your attention called to that?

A. Yes, that was late in the season. It was by one of the Plant-lice or Aphides. It was not actual bleeding of the trees but the fluid came from the Plant-lice on the tree. They emitted little drops of honey dew and these shot out like rain and the side-walks on some streets were rendered disgusting. Around houses where these trees were planted as shade trees, it was quite impossible to sit on the verandahs or walk on the paths with comfort. I do not think anything practical can be done to stop this on large trees, but anyone who can look back for a number of years, will remember that we have had no such visitation before, and I do not think it probable that we shall have a repetition of the trouble for some time. It was an unusul visitation by a Plant-louse just as was the case with the destructive Pea Plant-louse. This insect on the elms was a gray plant-louse which multiplied inside a distorted and curled up leaf. This made it impossible to get at the colonies by spraying. It is a well known aphis on the elm but one which does not often occur so abundantly as to injure the tree.

## AWNLESS BROME GRASS.

Before I sit down, Mr. Chairman, I should like just to mention a few facts about Awnless Brome Grass, a very valuable grass for all districts but particularly for the North-west. It has now been reported on by some thousands of farmers to whom

we have favorable of produced only is hard tree well on a found a

> Q. V A. H Q. Y A. T

Q. II
A. Y
this grass
being belie
letting it s
Awnless B
grass has a
better than
Island it is
intendent,

Q. Car A. The itself; how ing it down

В

Q, Wh A. Fro enormous or

By

Q. Hav A. Yes many other parts of Out

Q. We l A. It m is now being

> Q. How A. I dou

ehould judge Q. Some A. Very

Q. Is it of A. It is to about 18 co