

## APPENDIX No. 1

By Mr. Stewart:

Q. What would be the remedy to apply in the west where spring wheat is attacked?

A. The best remedy in Manitoba is cutting high, burning over the stubble, and also burning the straw after threshing.

Q. Or feeding it?

A. Yes, feeding, if you can feed it all before spring.

Q. That is pretty well done now.

A. It is more done now than formerly, and I believe it is largely responsible for the disappearance of the Hessian Fly. With more cattle all straw will be fed instead of burnt.

Q. In 1900, it was a dry year, and we had no Hessian fly. I do not know what was the reason, unless that the straw from the year before was thoroughly burned?

A. Yes, the insect disappeared then entirely. Information as to the proper steps to take was very widely distributed through the provincial department of agriculture. Mr. McKellar lets no grass grow under his feet as far as the farmers are concerned. Many burned over their stubble fields. This is a very useful practice, when it can be done, for the destruction of weed seeds, and there seemed an opportunity to do so in many districts that autumn. Most people also followed the advice given, and fed or burnt their straw before spring, so that a great many Hessian flies passing the winter in the flax-seed state in the straw were destroyed.

Q. These instructions were sent out pretty fully?

A. They were, and they were very well carried out, too. I may say this for the farmers of Manitoba: they are very wide awake and quick to adopt remedies when advised. It was the case with regard to the locust outbreaks. The ploughing down of all stubble before the young locusts hatched, and the applying of remedies as advised, were very carefully attended to, and excellent results followed.

By Mr. McGowan:

Q. What locusts were those. The ones that are due next season?

A. No. I think that what you refer to is the so-called 17-year locust, which is not really a locust at all. Its proper name is the harvest fly or Cicada. It has never occurred in Canada, and we are not likely to be troubled with it, although it will probably appear in Michigan and might come over our borders.

Q. In western Canada?

A. Yes. It is an insect with a curious life history; the larval period actually lasts for years, and the perfect insects occur in swarms, or pretty regularly at periods of 17 years. An occurrence of the insect is due next year in Southern Michigan, but we have never found it, as far as I am aware, in Canada, so I do not anticipate that we shall have any serious trouble.

## THE PEA WEEVIL.

By Mr. Ross (Ontario):

Q. To return again to the pea bug, a number of farmers declare that the peas they sow are free of bugs, and they have the idea that the bug remains in the soil all winter and comes out in the spring to attack the peas?

A. That is a mistake; it does not remain in the soil, but it is a beetle which flies with great ease, and can come from a considerable distance. It flies to the field when the peas are in bloom, or a little later, and lays its eggs on the young pods. When the peas are in blossom, is the time that these insects fly to the fields, and it has been observed that they feed on the young plants. The eggs are laid on the outside of the pods, and the grub when hatched eats its way through the pod into the nearest seed.