

## APPENDIX No. 1

*REMEDY.*—There is the well known remedy of fumigating the seed with bi-sulphide of carbon, by which the seed peas can be treated in an easy way, which any farmer can use, and which is perfectly satisfactory and effective, and yet many farmers are talking of going out of the cultivation of this most important crop.

*By Mr. Wilson:*

Q. You might give us the method of applying that remedy?

A. I will. The pea crop is far too valuable for farmers to give it up without a great effort being made to save it. All the large seed merchants should, and may have, 'bugging houses,' as they are called, where the seed peas are treated, and all the insects inside them are destroyed; but I feel sure that they are not using them as much as they used to do. On making inquiries, I am told that the best firms treat their seed as carefully as they did a few years ago, but I cannot think that this is the case, for pea seeds are constantly being sent in to me by farmers with requests for advice as to the way to kill the insects before sowing. Farmers should refuse to buy from firms who will not treat their seed, or in other words, who put the farmer to the expense of doing this work for them, and yet charge the full price for the seed. Weevilled seed peas are the chief means by which the insect is introduced into fresh districts, and this was undoubtedly the way in which the Pea Weevil was imported into Canada. The remedy as advised is quite reliable, and I urge its more general adoption on seedsmen and growers alike, as the best means to prevent the great loss which takes place every year from this cause. The work should be done as soon as possible after the peas are harvested. Thresh early and treat the seed at once. As a rule the weevils pass the winter as fully developed beetles inside the seed; although in some seasons many may leave the pease in the autumn. Early treatment of the seed not only destroys more of the insects, but does so before they have eaten so much of the seed, as is the case if the fumigation is not done until spring. For seedsmen who have large quantities of seed to treat, 'bugging houses' are necessary. These should be specially built for the purpose, away from all buildings and outside of towns.

## HOW TO APPLY THE REMEDY, AT HOME.

For farmers, many of whom use their own home grown seed, there is an easy method, which I have described in several of my reports. This consists of placing any quantity of seed up to 5 bushels, in an ordinary coal oil barrel, which will hold about that quantity nicely, and then pour on top of the seed, or place it in an open saucer, 1 ounce of the bi-sulphide for every 100 pounds of seed; close the barrel tightly and leave it closed for two days. Bi-sulphide of carbon is a colourless liquid with a very unpleasant odour, which vaporises readily in the ordinary temperature of the atmosphere in autumn. The vapour is heavier than the air, and consequently it sinks down through the peas in the barrel, and as it is very deadly to all insect life, it will in the time mentioned, 48 hours, penetrate through the skin of the pease and destroy all the weevils in the seed.

Q. You have to do it immediately after harvest to prepare the seed properly for the next year?

A. That is the best time.

*By the Chairman:*

Q. If the seed peas are buggy, they would spread the pest?

A. Certainly; but this insect is limited in the area where it propagates. Two or three years ago there was a large quantity of high class peas sent to the Almonte district to be grown for seed, because that district is outside the area where the Pea Weevil occurs naturally. Peas are a crop which can be grown in many districts where