

different plants will stand, it is only a matter of calculating the cubic contents of the greenhouses and then giving the proper quantity which can be used with safety. There is probably a remedy for every insect known, but the difficulty is to get a practical one to destroy them at a reasonable cost without injury to the plants.

Fumigation by hydrocyanic acid gas has been applied so successfully in treating greenhouses that very much is hoped for from the method. The large violet houses which in many parts have been established in Canada and become an important industry are liable to become infested by an insect which has done much harm in the United States and has also occurred in one of our Canadian houses. This is the Black Violet Aphis, which is very difficult to treat, because the violet is a delicate plant which will not allow the application of many remedies used for hardier plants. But by the use of this gas we can now destroy this and all other insects in greenhouses. The gas is applied with care, then the windows are opened to let the gas escape as soon as its work is done and before the plants are injured. The great danger, as I have said before, is its exceedingly poisonous nature.

I began to tell you, but was drawn away from the subject by a question, about the fumigation of a train in South Africa which had become badly infested with bed-bugs, this will illustrate how intensely poisonous this hydrocyanic acid gas is. A Kaffir tried to go into the train to take a sleep, and when the custodian was not watching for a moment, the Kaffir jumped up on the platform and tried to enter the car, he merely opened the door and had not even passed the door when he fell unconscious and it was two days before he got over the effects of inhaling the fumes; so you can see that this gas is most intensely poisonous. Another name for hydrocyanic acid gas, is prussic acid, a better known name for this most deadly poison. Notwithstanding all this, it is a practical remedy in the hands of specialists. I lay stress on this, because if we are to recommend a remedy for use by everybody every feature of the case has to be borne in mind, or some accident may happen or injury may be done to trees.

RECENTLY APPEARED INSECTS,—THE PEA LOUSE.

I have said that there were few new insects to report upon this year, nevertheless there are one or two which I should like to mention on account of their importance. The destructive Pea Louse. The pea crop this year was seriously infested by one of the plant lice, and it is a remarkable fact that this was an insect which never before had been observed in sufficient numbers to attract the attention of specialists; so we had to deal with what we call a new species, extending from the maritime provinces in the east to western Ontario, and north and south from central Ontario to the southern states. The damage was enormous among the pea fields further south, and in Maryland alone it is estimated that the loss was \$3,000,000. Now, the pea crop alone is not a big one compared with other crops, and when it is found that the loss in one state, and in this one crop, was as large as \$3,000,000, it shows the amount of injury sometimes done by insect pests. We had this destructive pea aphid in Canada, but not to that extent, though many crops were reduced to half what they should have been. The question naturally arises, are we likely to have it again next year? From what we know of plant-lice, I doubt this; and I do not think there is need for serious alarm regarding next season's crop.

By Mr. Cochrane:

Q. How does it affect the crop?

A. It sucks the sap from the pea plants and they die.

Q. As though the drought had struck it?

A. Yes; it was thought by most people that it was the drought which caused the injury, but when they went to look at the plants they found them covered with green plant-lice. One fact which makes me think that this pest will not be serious this year is that so many parasitic insects have been found accompanying the plant-