APPENDIX No. 2

find that on the heavier soils it won't thrive at all. It needs to be on a warm soil, although in western Ontario it grows well in the bottom lands. But here you have got to get a warmer soil or the tree is pretty nearly at a standstill. The farther north you go and the cooler it is the slower progress the tree makes.

By Mr. Wright (Renfrew):

Q. Is the walnut growing here?

A. Yes, our trees have been bearing fruit for quite a number of years.

Q. We have one in Renfrew growing on a clay soil?

A. We have a plantation on clay soil, or at least some on clay soil that are doing fairly well; but on cold sandy soil the trees are practically at a standstill, they don't make more than an inch or so of growth yearly. On a warm sandy soil they do very well and on a well drained clay soil they also do well, but not so well as on a warm sandy and gravelly soil. We find that the farther north the tree grows from its native place the warmer the soil has to be. We all know how the hard maple starts to climb the hillside to get into the sunshine. As you go north you find the hard maple, and other trees, gradually climb the hillsides where they get the light and heat.

LEAF BLIGHT OF HORSE CHESTNUT-PEAR BLIGHT-APPLE SPOT.

By Mr. Blain:

Q. In western Ontario a large number of horse chestnut trees are dying off. Have

you been experimenting or making inquiries as to the cause?

A. We have looked into that trouble and it is caused by a leaf disease called *Phyllosticta sphæropsoides*, but no spray has been satisfactory in checking it up to the present time, although Bordeaux mixture is recommended. The pear blight is another disease difficult to control, which is practically impossible to eradicate unless all the diseased parts are cut out, and that is an almost impracticable method. The pear blight has reduced the California pear orchards, I understand, nearly one-half, if not more, during the last few years since the disease was introduced there, and our fruit growers in Ontario know what a terrible thing it is. The difficulty is that it is a bacterial disease. It enters through the flowers and tender buds and once it gets in you cannot get it out with any spray. The only plan, as I say, is to keep cutting out the diseased parts, and even then unless everybody else adopts the practice the disease spreads very rapidly.

By Mr. Christie:

Q. Does not the horse chestnut do better in a warm climate?

A. Yes.

Q. In the northern part of our county they do not succeed, but in the southern

half they do splendidly?

A. You will not see very many horse chestnuts about Ottawa. We have tried them over and over again. They will live for a number of years and then gradually get stunted. I do not think there are very many chestnuts about Ottawa. There are one or two, I think, on Kent street, but as a rule they do not succeed in this district.

By Mr. Pickup:

Q. You say that the only remedy for the disease you spoke of which communicates itself to other trees is to cut out the parts affected. Does the same thing apply to spots on apples?

A. No.

Q. Would it be necessary for all to spray, right through the district in the case of spots on apples?