

for the reason that the apples were small. If the orchards had been cultivated as they should have been, the apples would have been of much better size.

Q. You are referring to the sod when you say that it was one of the worst crops we ever had?

A. Yes, that was the result owing to the orchards being in sod. The colour of the apples, however, is a little better than in cultivated ground.

*By Mr. Pickup:*

Q. And they last better?

A. And they last better, if picked in good time.

*By Mr. Lewis:*

Q. Does not the sod strengthen the growth of the tree?

A. If there is no hay taken off the soil is little exhausted by the grass, but not improved unless there is clover or other leguminous plants growing there. There is no plant food removed from the soil by the grass being there; it goes back as the grass rots. But what happens is this: There is a tremendous evaporation from the grass in summer. Take a season like last year when we wanted all the rain that we could get. That grass was preventing the rain from getting into the soil, and it was also transpiring a great amount of moisture from the leaves, and as a result the fruit suffered.

Q. What class of soil is the best for the apples of which you have been speaking?

A. We prefer a heavy sandy loam soil well drained.

Q. My reason for asking that is that in the section from which I come in the county of Huron the best apples seem to grow on sandy soil. Around the township of Goderich there is a good deal of land that is considered to be worth very little and there they have the best orchards?

A. It is like everything else, the further north you go in the apple districts the warmer the soil must be and the better drained. Of course, Lake Huron is not what you would call a northern district, although it is fairly well north. In certain sections of Ontario they grow good apples on clay soil. In Eastern Ontario you could not attempt to grow apples for any length of time on the clay soil. The warmer soils are these poorer soils you spoke of and that is why the trees do better. Farther south the trees do well in clay soil, because the climate is warmer, and they will succeed better. The farther north you go the warmer the soil must be, and in this district we find that a gravelly sub-soil is the best.

Q. What is the best apple growing county in Canada?

A. I would not like to say that.

Q. I think we have 15,000 more apple trees in the county of Huron than in any other county?

A. Each district has its own advantages and I should not like to say which is the best. For instance, in the extreme east, in the Annapolis valley, the people have the advantage of being near the sea-board and can ship their apples in better condition than can the growers in the interior of the country. There it takes a longer time to go to the sea-board, and they do not get the same advantage though they might produce as good apples. Each district has its advantages and disadvantages and the growers are gradually learning how to profit from local conditions. In connection with our work in raising seedlings and cross-bred apples, I would like to give you some idea of the kind of work we do in keeping the record of them. I have already stated that out of 3,000 Russian seedlings only four were propagated which are likely to be useful in the central part of Canada. The others which we have will probably be useful in the Northwest. In the case of the other seedlings, of which about 25 per cent are proving really desirable apples, we keep a record of them all. This is the kind of card upon which the record is entered (exhibiting card.) When the fruit