

## APPENDIX No. 1

A. The cultivation and treatment, however, was the same.

Q. Do they get the same manure in both cases ?

A. Yes, as a rule, they do. Our experimental plots since the arrangement was made to put a larger portion of the land under a regular rotation from which we are getting valuable information—have to be carried on now on three blocks of land and these same blocks are used from year to year for the experiments. Formerly we shifted around to fresh blocks every year but now we cannot do that, because it would interfere with the fields set apart for the rotation of crops. Have I made myself understood ?

Q. Quite so.

A. That system has been in operation for three years now, and while we have not had any material inconvenience, since we have to grow the grain crops in succession on these plots and follow with roots and corn the third year, we find it is necessary to manure these special experimental fields every three years, while the general farm crops in the regular rotation are manured once only in five years.

Q. How did the experiments in plots compare with the experiments in rotation ; it must be followed up ?

A. You see we have only yet had two years to report on.

Q. Well, so far as you have gone ?

A. So far as we have gone they vary considerably. Our land is very uneven in quality. There was one of our sections, in fact two of them, which were not thoroughly drained. The main drains which were first put down were not large enough and they had to be taken up and replaced by larger ones. We have the land now in good condition, but two years ago the crops on one section were injured by water and this interfered with our experiments. But, speaking in a general way, I would say that where the land of the fields will compare favourably in quality with the land on which we have the experimental plots, the crops also compare favourably.

*By Mr. Wright :*

Q. Did I understand you to say that you had put in 12-inch tiles ?

A. Yes ; that is for the main drain. It runs for a certain distance with 12-inch and then it is changed to 8-inch and further on to 6-inch.

*By Mr. Bell :*

Q. Does that 12-inch main run full ?

A. It runs full in the spring. We had only one 12-inch main last spring, but we have two now.

*By Mr. Wilson :*

Q. Is it a glazed tile pipe you use ?

A. No, it is an ordinary field tile. We sometimes use a few of the glazed tiles when passing near a clump of trees ; in such case, if the ordinary tile is used the roots of the trees find their way into the tile through the crevices, and sometimes grow to such an extent as to interfere with the flow of water. At first it was thought that abundant provision for carrying off the surplus water had been made with five 8-inch tiles on 400 acres, but in the spring it was usually two or three weeks before all the water found its way off the surface. Under those conditions seeding was so much delayed that it was quite a serious drawback.

*By Mr. Wright :*

Q. Talking about these drains, I have clay land and we had a tile drain and where it discharged, it is almost sure to make a deep coulee or gorge where the water runs down. Is there any means of preventing that ?