Mr. Lawrence also showed a photograph of a field of potatoes in bloom. During the month of July they have at Vermilion an occasional frost that sometimes cuts the potato vines down, but never puts them back seriously—just enough to show the effect of the frost on some of the top leaves. The potato vines, however, often show no sign of frost until they are ripe, and the potatoes obtain their full size and are matured. They had never had July frost severe enough to ruin the potato crops. These frosts are very slight.

Last summer Mr. Lawrence planted his garden during the week following May 24, and he planted tomatoes, cucumbers, peas and other vegetables. Last fall, during harvesting, his family had squash pie that was made from squash ripened in their own garden. The squash were raised just the same as the peas and other vegetables and took their chances, no hot-bed and no special care, and he also raised cucumbers and tomatoes. The tomatoes did not ripen, for before they had a chance to freeze they were taken up. The witness thought that with the care such as is given to these things in Manitoba and other parts of the northwest, planting these tender vegetables early in hot-beds, and giving them care, the same success could be had in raising tomatoes, squash or other things of that kind as is had in Manitoba and other districts. At the Peace river crossing tomatoes were ripened last year in the open garden. Other garden vegetables, such as cabbages, and so on grow very well. He has raised cabbages at Vermilion 18<sup>1</sup>/<sub>4</sub> pounds in weight, and swede turnips are raised in the open field. Out of a three-acre patch he had selected turnips, and a great many of them weighed from 18 to 25 pounds. They were of the purple top variety. They had no special attention or care, and they were good sound turnips. Although the season is none too long for the ripening of wheat, as has been found in Manitoba and the northwest, in order to be successful, the grain must be sown early, just as soon as the frost is out of the ground enough to permit the cultivation of the soil.

## THE CULTIVATION OF WHEAT.

Mr. Lawrence explained that he had farmed at Vermilion for over 20 years, and had never had a failure in wheat during that time, although he had as low as  $5\frac{1}{2}$  bushels to the acre. There was one very dry season which reduced the average, but there was always a certain amount of grain raised there that was good for seed and grinding purposes. There has never been a complete failure from frost or any other cause. They have no rust on the wheat up there.

He had raised as much as 66 bushels of wheat to the acre. That was the biggest yield, and accomplished without any fertilizer whatever.

The witness drew the attention of the committee to the fact that some years ago Dr. Dawson went through the Peace river country and reported that a large part of it was covered with muskeg and would be permanently unsuited for agriculture. Four years ago the witness took a trip from Fort Vermilion through Lesser Slave lake. through an unknown country 250 miles. Later than that he travelled away from the Peace river about 50 or 60 miles, and saw something that gave him an idea of these muskegs. The muskegs had covered some large patches of that country, and the moss was about three feet in thickness. There had been large tracts of this moss burnt out. Forest fires had been running through there, and Mr. Lawrence supposed that the fire burnt thousands of acres that had formerly been muskeg, as shown by these large patches of moss, sometimes a few feet across and sometimes larger, which was left standing, where the muskeg had been. On this burnt area the witness saw grass from four to five feet in height. There were thousands of acres of it covered with the red-top grass, which is the standard grass of the west. The reason these muskegs had been there for so many years was that the moss formed a great sponge and retained the moisture. But when all that land is drained, and the moss removed, it will certainly raise good crops of grass, and where grass can be grown, grain can be raised. There