

SELECT STANDING COMMITTEE ON AGRICULTURE AND COLONIZATION

HOUSE OF COMMONS,

March 26, 1925.

The Committee met, Mr. Kay, the Chairman, presiding.

The CHAIRMAN: Gentlemen, we have Mr. Newman, this morning, and he will address us on the production of wheat and other grains.

Mr. NEWMAN: The title of my address as printed is "A brief history of cereal breeding work and its influence on the agriculture of the country." When the Experimental Farm System got into action about 1888, Dr. William Saunders, its first Director, recognized that one of the most pressing problems at the time in Canadian agriculture was that of producing a wheat for the western provinces which would be superior to the old Red Fife variety, particularly as regards date of maturing. Although Red Fife was quite productive, it was too late in many districts and, in many cases where it was grown, farmers suffered severely from losses due to frost. Dr. Saunders first carried on some selection work with some of the old varieties, but failing to achieve his end in this manner, he imported from other countries a number of promising wheats, some from Russia, some from India, some from China and from other countries. Among the numerous varieties he brought in was one called Ladoga, which was fairly early, fairly productive, not very strong in the straw, but which looked promising. When a sufficient quantity had been produced to permit a milling and baking test to be made, it was found that this variety was not a good quality wheat. However, it was early and therefore was crossed with Red Fife and White Fife, and as a result Dr. Saunders produced four new wheats, one called Huron, one Preston, one Percy, and one Stanley, which were placed on the market and which were of very considerable value. I have a sample here of the Huron wheat which is the wheat we recommend for eastern Ontario and Eastern Canada generally. It is a very strong strawed wheat, standing up under almost any circumstances, a good yielder and of reasonably good quality for domestic use. We do not recommend it for export. We have also found Huron to possess considerable rust resistance, and we are using it, to quite an extent in our breeding work, in connection with the wheat stem rust problem.

None of the above wheats, unfortunately, were quite as good in quality as they should be, so Dr. Saunders sought for other varieties with which to cross Red Fife. He had the good fortune to obtain from India an early wheat of good quality called Early Hard Calcutta. This wheat, however, was not very strong in the straw nor was it very productive. He had a number of crosses between these two varieties made and, as a result, there was produced the famous Marquis wheat with which you are all familiar, a wheat which has meant millions of dollars to this country. In 1923, I made an estimate of what it was worth, over and above what Red Fife would have been worth to western Canada in that one year, on the basis of our Experimental Stations' actual yields for over ten years. It figured out at something over \$50,000,000 for the one year, to say nothing of the extent to which the wheat growing areas were extended by the introduction of that wheat. Marquis has been a decided contribution. It was developed and introduced by Dr. Charles Saunders and is now grown very largely throughout the west. It occupies, according to statistics, about 90 per cent of all the spring wheat grown in western Canada, and about 70 per cent of