

products, that it will only be possible for me on the present occasion to refer to a few of the more important features of this work and to direct your attention to those conclusions that seem to be of special interest to us as Canadians.

In 1888 we began an examination of our wheat, the results being published in Bulletin No. 4 of the Experimental Farm Series. That work was almost exclusively confined to wheat grown in Manitoba and the North-West Territories. Not only was the composition of the grain ascertained, but as far as possible the influence of climate, soil and cultivation upon the wheat were studied. Our analyses of the western wheats showed besides other good features, a large percentage of albuminoids (gluten). Both the physical and chemical data testified to the excellent milling qualities and the high nutritive value of the Red Fife as grown in the provinces referred to. The effect of environment upon wheat is an interesting study, but one into which we cannot to-night examine with minuteness. It must suffice to state that the conditions of the North-West appear to be particularly favourable to the increase in the most important constituents of the wheat, viz: the albuminoids the percentage of albuminoids (or flesh-formers) present being the chief factor used in grading and valuing wheat.

Further analytical work on Canadian cereals was that done by me when acting as a professional juror at the World's Columbian Exposition in Chicago in 1893. Of 166 samples of wheat submitted to analysis, 49 were from Canada. The data, which are published in my report now in press, again furnish ample proof of the very excellent qualities of the wheat from Manitoba and the North-West Territories. Indeed, the averages from these provinces are fully equal to those afforded by the best grain growing districts of the world. The samples submitted by the Province of Ontario at this Exposition had not been selected with care or skill, and, as a result, the general Canadian average of quality appears to be much lower than it really is.