## NINTH REPORT

House of Commons,

TUESDAY, May, 6, 1928.

The Select Standing Committee on Agriculture and Colonization begs leave to submit its Ninth Report as follows:

Your committee have had under consideration a Resolution and Order of Reference dated February 16, 1928, whereby it was resolved: "That whereas the protein content is an important factor in the value of wheat.

Therefore be it resolved that in the opinion of this House, the National Council of Industrial and Scientific Research in conjunction with the Board of Grain Commissioners be asked to investigate and report on the feasibility of utilizing the protein content of wheat as a basic factor in the grading of that product.

And further be it resolved that this resolution be referred to the Committee on Agriculture and Colonization for consideration and for such suggestions in connection with the grading and inspection of wheat as it deems advisable to pass on to the said National Council and Board of Grain Commissioners."

Pursuant to the said Resolution and Order of Reference, your committee has agreed to the following conclusions, which it has passed on to the said National Council and the Board of Grain Commissioners, viz:

- 1. From a price standpoint baking strength is an important element in wheat, and in the Canada Grain Act definitions of our higher grades, baking strength is determined by two factors—variety and percentage of hard red vitreous kernels.
- 2. In the resolution submitted to your Committee it is proposed to amend the Grain Act so as to determine baking strength by the two factors—variety and quantity of protein—the latter to be determined by a chemical test and to be expressed in percentages.
- 3. In Canada, Great Britain, the United States and probably most other countries that consume Canadian wheat, baking strength is an important factor in determining its value; by strength is meant the quantity and quality of protein.
- 4. Except in the case of Durum wheat, which at present is graded in a class by itself, and possibly one or two other varieties that are grown in relatively small quantities, the protein in the contract grades can be assumed to be of good quality.
- 5. All things considered, the amount of gluten, that is, of protein, seems, in the light of present day knowledge to be the nearest approach to an ideal index of baking strength available.
- 6. The cost of making the protein tests would range from 50 cents to 75 cents, and is not considered a serious difficulty notwithstanding the fact that laboratories would necessarily have to be intstalled at all inspection points. We would suggest that data be obtained as to cost of installing and maintaining laboratories.