average loaf volume follows the average protein content in both of these crops when No. 1 dark northern and No. 1 northern spring wheat flour are contrasted, the advantage being in favour of the No. 1 northern flours in both seasons. This suggests that careful consideration should be given to the possibility of classifying wheat on the basis of protein content rather than on the basis of the less tangible factor of the percentage of dark, hard and vitreous kernels, since the crude protein is determined with far greater precision and is probably more definitely related to baking strength than is the kernel texture.

Then, an extract from the "American Miller" of March 1, 1928:—

> If there is anything that will stimulate wheat culture with the object to be attained, a larger percentage of protein, it is the fact that acceptable to bakers, resulting in an active competition among millers for wheat of high protein content, and a high price for choice wheats; a premium of 50 cents per bushel is now being paid over the May option. An increase in protein has been accomplished by the use of certain plant foods in plants grown side by side, one treated and one untreated, their experiments will continue and it is hoped result in a success commercially.

I have forgotten where that "American Miller" is printed, but I think it is Minneapolis.

Next, I quote from a letter from the United States Department of Agriculture, the Bureau of Agricultural Economics, Chicago:—

> Practically all wheat sold and purchased in this country is marketed by grade. In recent years, however, there has been a demand created for bread wheat of high protein content which usually commands a premium over wheat of average protein content. That the producer or country shipper may take advantage of these premiums, they are having the protein determined upon arrival of the wheat at terminal markets before the grain is offered for sale. Laboratories to perform this service have been established by private concerns, boards of trade and in one instance by a state grain inspection department. Charges for making these tests range from 65 cents to $1. (In Kansas City, Missouri, the laboratories can make 3,000 tests per day.) In the Hard Red Winter and Hard Red Spring wheats, those containing less than 11.0 per cent protein usually bring the average daily market price for their numerical grades; for wheats containing above 11.0 per cent protein the premiums for each ¼ per cent will range from one to two and one-half cents per bushel. The protein content is not shown on the inspection certificate but is shown on a separate certificate issued by the laboratory making the test.

An excerpt from "The Food Research Institute, Stanford University, California, February, 1926."

> Nevertheless, all things considered, the amount of gluten that is, of protein, seems in the light of the present-day knowledge to be the nearest approach to an ideal index of baking strength available. The baker who depends upon it alone will now and then be deceived. If, however, he knows the variety and place of origin of the wheat from which the flour is milled, he will often be misled.

A later letter from "The National Testing Laboratories, Limited" of Winnipeg. It is dated 11th April, 1928, and is in response to a letter from me.

> We have your letter of the 31st ultimo inquiring as to the staff necessary to make 2,400 protein tests in twenty-four hours.

[John Millar, M.P.]