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TESTING OF NEW-ZEALAND-GROWN WHEATS.

III. BAKING-TESTS OF FLOURS.

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PRACTICAL tests being always the more convincing, it was considered advisable, in continuation of the testing of New-Zealand-grown wheats, to corroborate by actual baking-tests information obtained from the chemical examination of flours, and to illustrate if possible the truth of the statement that the protein content of a wheat (or flour) is generally a fair measure of its strength. Baking-tests of the flours from wheats which were experimentally milled have now been successfully carried out in this Laboratory. For the results of the chemical analyses the reader is referred to Table II in this series, in the August issue of the *Journal*.

Bread, according to T. B. Wood, is the product of cooking or baking a mixture of flour, water, and salt, which is made porous by the addition of yeast. Several varieties of the process of breadmaking are practised, but for the purposes of these tests the "straight-dough" process was used, and for the following reasons: It required less time, it was easier to control the temperature-changes over a comparatively short period than over the longer periods of the other methods, and the results were likely to be more accurate.

It is at once apparent that in making tests on different samples it is imperative that they should be so conducted that the differences in results are due to the inherent qualities of the flours themselves, and not to modifications of the method used. It is therefore of importance that the conditions under which the tests are carried out should be strictly the same in every case. These conditions are maintained chiefly by careful regulation of the temperatures from the time the dough is first mixed to the time the bread is finally removed from the oven.