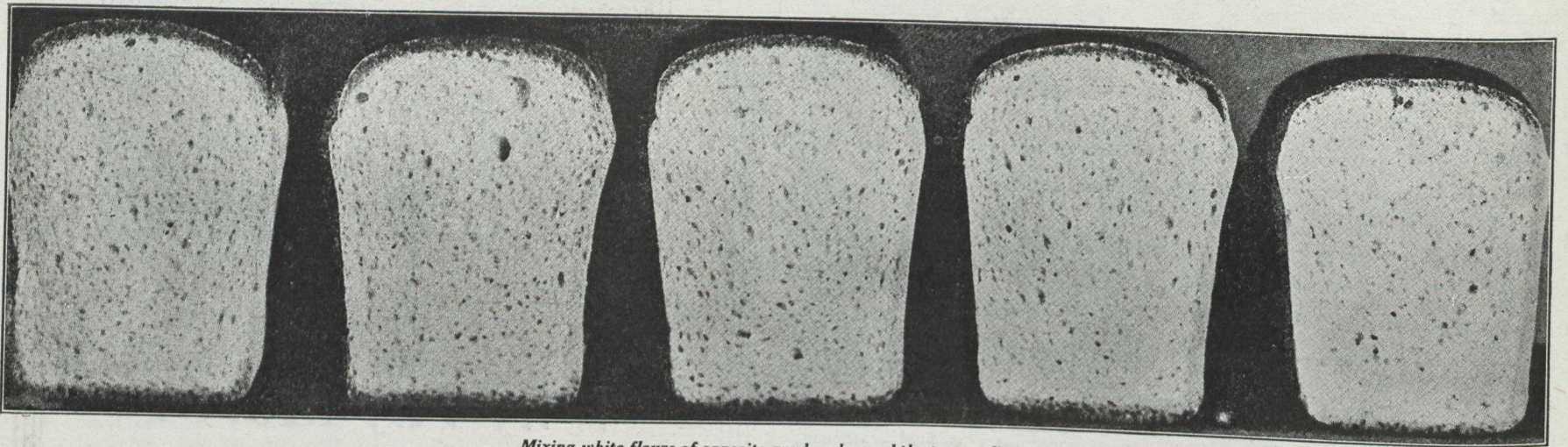


Making the Most of Available Flours

Adapting the New Grades to Practical Recipes

By KATHERINE M. CALDWELL, B.A.



Mixing white flours of opposite grades changed the texture little



WAR FLOUR for Canada has been a possibility for some time; it is now a fact. The Government has decreed that our flour must contain more of each grain of wheat that is milled—the meaning of the term, “higher extraction.” Only a part of the wheat grain is converted into white flour, the remainder being sold as bran and as cattle feed. The new ruling calls for at least seventy-four pounds of flour from each one hundred pounds of wheat, instead of about seventy-two pounds, which has hitherto been the usual average. A mill that formerly turned out high, medium, and low grade flours must now run them all together.

Now, while this means that a little more of the wheat berry is used, it by no means ordains the milling of a graham or brown flour. In appearance, the new flour is just a trifle darker—a more creamy tone. Rubbed between the fingers, there is little appreciable difference between it and the patent white flours to which we have become accustomed, although there is a little added coarseness to the grain of the new flour. In flavor, there is little difference, and the nutritive value remains much the same.

The necessity for this flour measure is its sole and sufficient reason. Canada has held the record amongst all the countries of the world for the highest per capita consumption of wheat. That is a distinction which we are by no means anxious to maintain, in these days of wheat-need across the sea. Our average consumption rate of nine bushels per capita each year should be reduced in 1918 to five and two-fifths bushels.

The “higher extraction” measure is intended to help effect this reduction. Two pounds more of flour from each hundred weight of wheat may not impress us from the standpoint of a single bag of flour. But based on the estimate of our wheat-crop of last year—215,000,000 bushels, or 12,900,000,000 pounds—we see a guarantee of 258,000,000 pounds more flour.

In Our Own Kitchen

THIS looks most reasonable and beneficent, thinks the patriotic woman. But—“just what does it mean when reduced to terms of *baking and me*—of a new flour and an old recipe?

This uncertainty is very general and has had in some instances the lamentable effect of enticing people to put in a supply of the old flour that is out of all proportion to their immediate needs.

A woman can scarcely commit a more glaring breach of loyalty to-day than by hoarding food. It is second only to the sin of wasting food.

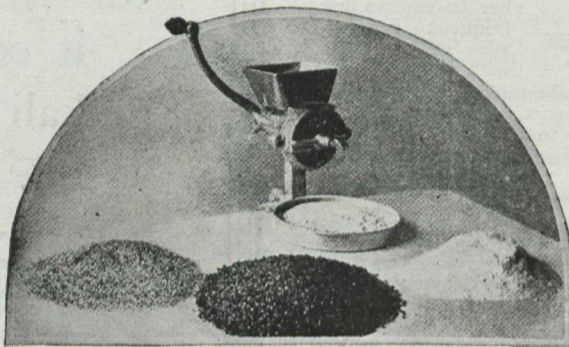
In the case of flour it is as unnecessary as it is unpatriotic. As confidence in the new flour spreads, the few instances where uneasiness led to the laying in of large supplies are being revealed as foolish to the hoarders; should the rumoured government inspection be put into effect, exposure will add shame to the sense of personal inadequacy that failure to do their part will have instilled.

Old Grades and New

THERE will still be flours so blended that they will answer the various needs for home baking. Some brands were already maintaining a high extraction percentage, and will not be greatly affected—the so-called single-stream flour, where only one grade of flour was milled from selected wheat of a particular class.

There will also be the various flours adapted to special uses. Whether a flour be milled from hard wheat or soft, as a bread flour or a pastry flour, or whether it be produced from a blend of wheats, as an all-round flour, it will be regulated in just the same way. Instead of a miller making several grades of flour from the same class of wheat, he must now make only one grade from that class—a flour that will retain seventy-four per cent. of the wheat.

The actual quality of the material that goes into the flour, the careful selection and testing of the wheat, and the utmost science used in its conversion into flour—



A hand mill in your own home will provide war flours of many kinds

differ not at all from the old standards. Canadian patent flours have built up a very fine reputation abroad as well as at home, and the flour that is produced in accordance with necessary war-time standards is naturally going to be as good flour as expert millers can turn out.

Adapting To Our Own Uses

THE new flours will be richer in gluten, as one effect of milling more of the wheat. As gluten is the substance that gives the dough its stick-togetherness, a little less manipulation will be in order, to avoid giving a too-elastic texture or making the product “tough.” Just a trifle less liquid has been advocated in some cases, as well as speeding up the mixing and handling; other millers advocate a slight increase in the liquids used, so this point will be governed by the character of the flour to which you have been accustomed.

For the most part, it seems advisable to use just a little more yeast than before, or in any case, to allow a longer time for the same to rise.

One's own cooking intelligence will quickly point out

any slight change in the results one is accustomed to get. Every woman has her own little “ways,” her own small variations of procedure, and will make her own adaptations in using the new grade flours and the “wheat-savers” such as cornmeal, rye, barley and oatmeal.

The illustration at the top of this page visualizes the difference in the size and texture of loaves made from various mixtures of wheat flours. The experiments were made with two grades of flour—a special low-grade flour and a high-patent flour (the best white flours we have been using). The two grades were mixed in varying proportions as follows:

The first loaf, following from left to right, is made entirely of high-patent flour; the second is three-quarters patent flour and one-quarter low-grade flour; the third is half-and-half; the fourth has only one-quarter entirely of the low-grade product.

There is obviously not a great deal of difference to be observed in the texture of the loaves—all of which were made by exactly the same method, with no attempt to vary it to get the best results from the changed materials. Analysis showed just what we would expect—more moisture, ash and fat as the proportion of low-grade flour increased and less of the carbo-hydrates that are so high in the patent flour.

So it is with the new stream of flour from all our mills—there will be a little more ash and fat, a little less starch in them, far more of the bran is included, which is richer in all but the starch element. But the texture of our loaves will not differ greatly, especially after a trial or two has demonstrated the sameness and the difference to be observed.

Using Mixed Flours

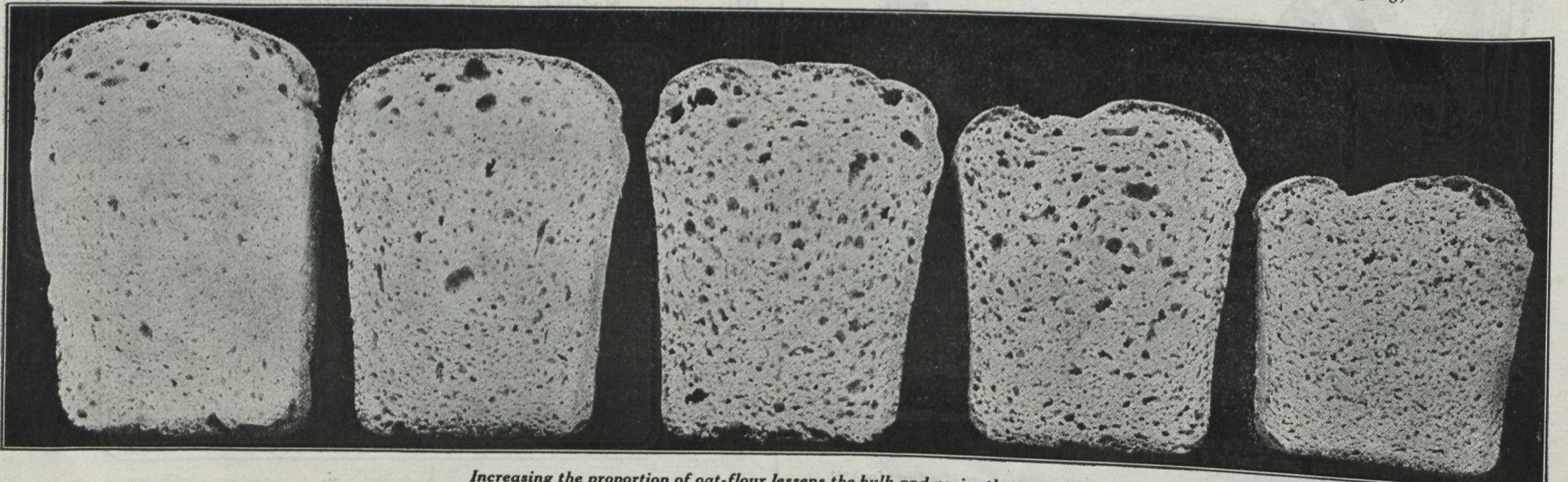
SINCE wheat conservation began, we have become increasingly familiar with corn and oatmeals, whole wheat, graham, rye and barley flours, bran, buckwheat, rice and potatoes as substitutes—in fact, these products are so fast making a new place for themselves that they may blot out the idea that they stand as substitutes for anything, fixing rather a new staple value of their own.

They may be used in proportions anywhere from 25 per cent. to 75 per cent. of white flour, but one-quarter to one-third substitute is most liked and offers an infinite variety of palatable breads for our consideration.

The illustration at the bottom of this page shows the apparent effect of mixing oat flour (or oatmeal ground very fine) with a high patent flour. The mixture of wheat and oats is a peculiarly happy one, as each complements the other so markedly—the oats being higher in ash, fats and protein, the wheat dominating in gluten and carbo-hydrate value (starch). The proportions used are different to those in the all-wheat breads first mentioned—the oats are increased 10 per cent. in each loaf, beginning with the second, so that the small loaf at the end contains forty per cent. oat flour to sixty per cent. wheat. It is smaller, owing to the diminishing amount of the wheat gluten present.

Judicious mixture, therefore, holds out all sorts of beckoning possibilities to the ingenious cook. More or less liquid as the flour may dictate; more or less yeast,

(Continued on page 23)



Increasing the proportion of oat-flour lessens the bulk and varies the texture