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stored together it will be to the advantage of the purchaser to buy the bleached flour, provided it is weighed for him at the time of sale. If, however, the weighing, was done immediately after the bleaching it is quite another question. In that case it is quite possible that, after storage, a bag of bleached flour would be found, if re-weighed, to be lighter than a bag of unbleached flour, though both might contain the same quantity of dry matter.

## BAKING STRENGTH OF BLEACHED AND UNBLEACHED FLOUR.

The relative baking strength of bleached and unbleached flour is a question of considerable importance to which not much attention has usually been paid. The question to be answered is, does the bleached flour make bread materially different from the unbleached in any other respect than in colour? I have taken up this problem very carefully with twelve samples of flour, six bleached and six unbleached; and I am obliged to say that the difference in baking strength in almost every case is clearly within the unavoidable limits of experimental error. In one case there is a difference of about two points in favour of the bleached flour (in the scale for baking strength which I use.) But even this difference is so slight that I cannot say it is beyond the possible errors of experiment. It is the average result of four separate determinations which agreed fairly well. In another case I found a similar difference but in favour of the unbleached flour; but in this case neither sample of flour gave good bread. In the other pairs of samples examined the differences were less than these and really amount to nothing. I am not prepared to say that there is any consistent difference in bread making strength between unbleached and bleached flours. It is quite clear, however, that good bread-making flours are not lowered in their strength for that purpose when bleached.

These comparative bakings were done all together under absolutely the same con-

ditions, the flours being tested in pairs, the bleached beside the unbleached.

Q. The flours were the same?

A. Yes, exactly the same. Half of each original sample was bleached and the other half left in its natural state.

## By Mr. Currie (Simcoe):

Q. If an inferior flour, which by its very appearance would show the purchaser that good bread could not be made from it, were to be bleached, would the bleaching not have a tendency to deceive the purchaser and lead him to think the flour was first class?

A. It is possible that might occur, a false impression might sometimes be produced; but I am not sure that I understand just what you mean by a flour which by its appearance would show clearly that it was unfit for bread making. Some rather dark flours make very good bread. It is difficult to judge by appearances.

Q. No one would go to the expense of bleaching flour unless there was money in it? The commercial side of it is what the business community will look at.

Are not the manufacturers able, by bleaching, to get a higher price for a lower grade flour—is that not an imposition on the public? That is the question.

A. I am not in a position to fully answer that; but as a matter of fact bleaching is by no means confined to the lower grades of flour. The finest flours are sometimes bleached, and I do not think that it is primarily a question of trying to raise a low grade flour. It has been claimed that if flour had specks of bran, &c. in it these would be more conspicuous after the bleaching. But even if we accept that statement in regard to really low grade flours, it does not dispose of the case of flours of intermediate grade, well milled, but rather dark. It is easy to conceive that such