



The Household.

Bread and Bread-Making.

We are indebted to Mr Geo. Longman, of the Toronto Mechanics' Institute, for the following article which he sends in reply to the enquiry made by "A Subscriber," in our last issue:—"Perhaps some of your correspondents could tell me how to make Brown (or Graham) bread?" This article is taken from the *Herald of Health*, published by Dr. Trall, New York, and was prepared for that paper by Mrs. Jones, Matron of the Hygienic Institute in that city.

As by common consent bread is the "Staff of Life," the question naturally arises, "What are the best materials of which it can be made, and the best methods of making it?" The common white flour, tormented bread, which is so universally used, is very far from being the best as an article of diet. The use of fine or bolted flour, has opened upon the community a perfect "Pandora's Box" of evils in the shape of constipation and the ten thousand ailments to which it gives rise. By the separation of the bran from the flour, not only a portion of the grain necessary to the proper distension of the stomach and bowels is removed, but it has been repeatedly proved by chemical analysis that the bran is as rich, or richer, in nutritious substances than the flour. These are not merely the "notions" of "hair-brained" "bran bread," "crazy fanatics" but facts which recommend themselves to the common sense of all who will investigate, which have been proved by the experience of thousands, and which have been demonstrated by the highest scientific authorities, a few of which we quote:—

Dr. Johnston, M.A., F.R.S., F.G.S., &c., in his *Chemistry of Common Life*, says:—"The bran or husk of wheat, which is separated from the fine flour in the mill, and is often condemned to humbler uses, is somewhat more nutritious than either the grain as a whole, or the whiter part of the flour. The nutritive quality of any variety of grain depends very much upon the proportion of gluten it contains; and the proportions of this in the whole grain, the bran and the fine flour respectively, of the same sample of wheat, are very nearly as follows."

Whole grain	12.11	ct.
Whole bran	14.19	"
Fine flour	10	"

If the grain, as a whole, contains more than twelve per cent of gluten, the bran and the flour will also contain more than is above represented, and in like proportion. The whole meal obtained by simply grinding the grain is equally nutritious with the grain itself. By sifting out the bran we render the meal less nutritious, weight for weight, and when we consider that the bran is rarely less, and is sometimes considerably more, than one-fourth of the whole weight of the grain, we must see that the total separation of the covering of the grain causes much waste of wholesome human food. Bread made from the whole meal is, therefore, more nutritious; and as many persons find it a more salutary food than white bread, it ought to be more generally preferred and used."

Prof. Youmans, author of the standard works on *Chemistry, Household Science, Chemical Chart, &c.*, says:—"The grain of which bread is made consists mostly of starch, gluten, and sugar. The lignous husk of grain produces the bran, while the flour is formed by the interior white portions. The gluten is tougher and more difficult to grind than the starch, hence the finest and whitest flour, obtained by repeated siftings, contains a larger proportion of starch, the darker coloured flour being richer in gluten, and as the nutritive properties of flour are in proportion to the nitrogenized element (gluten,) the latter kind will make the most nutritious bread."

The *Delicate Recruit*, in an article entitled "Frauds in Food," says:—"Many of the most important elements of our blood, brain and bone, are found in the greatest abundance in the coloured, outer part of the wheat, which we deem fittest for pigs, so we fatten them and suffer ourselves. The difference in nourishing properties between whole meal flour and very finely dressed flour amounts in many cases, to fully one third."

Dr. Bennett says:—"Now, if there is a well established fact emanating from chemical analysis, it is this: that superfine or very finely bolted wheat flour will not alone sustain animal life. This fact has been repeatedly demonstrated by Magend, the greatest physiologist that ever lived. Having ascertained that the muscular and nervous tissues, including the whole brain or cerebral mass, was composed of nitrogenous matter, he readily concluded that starch, or the fecula of wheat, which not alone sustains animal life, for the reason that it contains, not a particle of nitrogenous matter. Consequently, he found by experiment, that animals fed exclusively on very finely dressed flour, died in a few weeks, whereas those fed on the unbolted thrived."

Dr. John Ellis, *Professor of the Principles and Practice of Medicine*, says:—"The worst case of scurvy I ever had to treat, occurred in a little girl, five or six years old, who lived entirely on toast made of superfine flour."

The second objection to the common method of bread making is the fermenting process to which it is subjected. Fermentation as all persons at all conversant with chemistry know, is, as described by Professor Johnson:—"The consequence of a peculiar action, which yeast exercises upon moist flour. It first changes a portion of the starch of the flour into sugar, and then converts this sugar into alcohol and carbonic acid, in the same way as it does when it is added to the worts of the brewer or the distiller. As the gas cannot escape from the glutinous dough, it collects within it in large bubbles, and makes it swell, till the heat of the oven kills the yeast plant, and causes the fermentation to cease."

Professor Youmans says:—"If the fermentation proceeds too far, the dough becomes sour; that is, the vinous passes into the acetous fermentation, the alcohol changes to vinegar."

Who would think of taking a half decayed apple or potatoe and subjecting it to the action of heat to stay the process of putrefaction, and then placing it before human beings as food? And yet this is precisely what is done by fermentation. Take a common bread "sponge," as it is called. Let it remain thirty-six hours longer than usual, and what is the result?—a sour almost putrid mass. This process of putrefaction commences the moment the yeast is added to moist flour, and is only checked by the action of heat. Baker's bread is often still more objectionable, from the fact that an inferior article of flour is used which is disguised by the introduction of alum and other chemicals. Soda and saleratus, in all their forms, are decidedly injurious, and when introduced into bread, biscuit and other articles of food, are a prolific source of disease.

Having demonstrated the effects of bad material and bad management of it we will consider what are the best materials and the best methods of preparing and cooking them. Bread, to be the most wholesome and palatable, should contain but two ingredients.—unbolted flour made from the best quality of wheat or other grain, and pure water. The following, so far as we know, are the preferable methods of making it arranged in the order of their respective merits:

UNLEAVENED BREAD.

No. 1.—**GENS.**—Stir together Graham flour and cold water to about the consistency of ordinary cupcake batter. Bake in a hot oven in small tin patty pans, two inches square and three-fourths of an inch deep.

**NOTE.**—This makes delicious bread. It may be improved by beating the batter in the same manner as eggs are beaten, for five, ten or fifteen minutes; the longer the better. No definite rule as to the proportions of flour and water can be given, owing to the difference in the absorbing power of various brands of flour.

Many persons have failed of success in making this bread from neglecting one very essential requisite—the size of the pans in which it is baked. If they are larger than the dimensions given, the bread will be heavy. If smaller, it will be dry and hard.

But made this size, and filled evenly full, if the batter is of the right consistency, and the oven hot, they will rise one half, and be almost as light and porous as sponge cake.

No. 2.—**DIAMONDS.**—Pour boiling water on Graham flour—stirring rapidly till all the flour is wet. Too much stirring makes it tough. It should be about as thick as can be stirred easily with a strong iron spoon. Place the dough with plenty of flour upon the moulding board and knead it for two or three minutes. Roll out one half an inch thick, and cut it in small cakes or rolls. If a large quantity is required, roll about three-fourths of an inch thick, and cut with a knife in diamond shape. Bake in a very hot oven forty-five minutes.

**NOTE.**—The names by which these two kinds of bread are known in our Institution are merely arbitrary. Years ago the guests of the house christened the 2 diamonds, from their shape. No 1 being of quite recent introduction, and, as many think, much superior, some facetious patient, on their first appearance suggested "Gems," as an appropriate name, and, accordingly, gems went the round of the tables till the roughest became freely attached to them.

No. 3.—**GRAHAM BISCUIT.**—Make Graham mush as for the table. When cool, mix with it Graham flour sufficient to roll well. Knead for a few minutes, roll three-fourths of an inch thick, cut with a common

biscuit cutter, and bake in a hot oven from thirty-five to forty-five minutes.

No. 4.—**GRAHAM BISCUIT**—(another form.)—Stir into cold water Graham flour enough for a rather soft dough; knead it for five or ten minutes, and bake the same as No. 3.

**NOTE.**—When these have become a little dry or hard, cut in small pieces, cover with cold water, soak till thoroughly soft, when the water should be all absorbed. Strain through a colander, mix Graham flour sufficient to roll, and bake in the same form as at first. This is even superior to the original bread.

No. 5.—**WHEAT MEAL CRISPS.**—Make a very stiff dough of Graham flour and cold water; knead thoroughly, roll as thin as possible and bake for twenty minutes in a hot oven.

No. 6.—**GRAHAM CRACKERS** are made by mixing cold water and Graham flour together, and kneading very thoroughly. They can only be well made by the machinery used in cracker bakeries.

RYE AND OATMEAL BREAD.

Unbolted rye or oatmeal, prepared after receipt No. 4, makes excellent and wholesome bread for those who like the peculiar flavour of these grains.

CORN CAKES.

Pour 1 quart boiling water on 1 quart corn meal, and stir quickly. Wet the hands and form into small round cakes one-half inch thick. The addition of a few raspberries, huckleberries, or any sub-acid fruit, is a decided improvement. Sweet apples, chopped fine, are also excellent.

CORN BREAD.

Stir thoroughly together 1 quart sweet milk, and 1 quart corn meal. This is also improved by beating. Bake in a deep platter, in a hot oven, about forty-five minutes. These proportions will not hold good in all cases owing to the difference in meal. A few trials, however, will enable any one to judge as to how much of each is required.

In the use of unbolted flour persons need not be restricted to the modes of preparing it, given above; they may use yeast, soda, salt, saleratus or other compounds, and have bread proportionally better than fine flour bread mixed with the same ingredients. However, we are satisfied that, those who will give the pure unleavened bread a fair trial will have little inclination to return to the use of the former, as they will find the other more palatable, nutritious, wholesome, and economical.

Preparing Salted Meats.

To the Editor of THE CANADA FARMER:

Sir,—Herewith I give you my method of preparing salted meats for cooking:—Take your pork or beef from the brine, after rinsing it in clean cold water, place it in a large vessel—an earthen crock is preferable—then cover it with cold water, allowing it to freshen at least two days, changing the water on it morning and evening in summer, and mornings only in winter; take your meat out of the water and hang it in a cool, dry place, and it is ready for boiling, roasting or frying. This is much better than the extravagant method of par-boiling every time you wish to use it, and throwing the rich liquid in the slop pail, or throwing it away altogether, as I have known some wasteful persons do. Mrs. Z.

To PROTECT DRIED FRUIT FROM WORMS.—It is said that dried fruit put away with a little saffras bark (say a large handful to a bushel) will keep for years, unmolested by those troublesome insects, which so often destroy hundreds of bushels in a season. The remedy is cheap and simple.

To CLEAN PAPER HANGINGS.—Put a clean, soft bag or an old pillow-case, over a new broom, and gently, brush the dust from the paper; then take crusts of stale bakers' bread, and wipe it down lightly, beginning at the top. If you rub it the dirt will adhere to the paper. After thus brushing all around the upper parts of the walls with the bread, begin just where you left off, and go around again. Do this until you have finished the paper. The dust and crumbs will fall together. Whenever a room is cleaned it is a good way, before the paint and windows are washed, to wipe the paper with a covered broom, as above directed.

To WASH FLANNEL WITHOUT SHRINKING.—Make a strong suds and put in your flannel or white woollen stockings, while the water is boiling hot. Then squeeze and pound them with a pestle till the water is cool enough to put your hands to the work. You will find that there is little need of rubbing. Rinse in water as hot as the hands will bear. If there is a little soap remaining in the rinsing water, it is all the better. The sooner they are dried the less they will shrink. This method, from an old housekeeper, is sure to prove just the right way, if strictly followed. —Pleasantman.