

to be transferred to the County Councils, the amount estimated to be received from these sources being about five and a half millions; while, on the other hand, certain grants in aid of Local Taxation, amounting to two and a half millions, which have heretofore been paid out of the National Taxes, are now withdrawn.

The vexed question of the control of the police is disposed of under the Act by the appointment of a Joint Committee of the Quarter Sessions and County Council, the Committee consisting of an equal number of justices appointed by Quarter Sessions, and of members of the County Council appointed by that Council. Besides these great, varied, and most

important tasks directly imposed upon the County Councils by the Local Government Act, there are certain other powers which may be entrusted to them under Provisional Orders issued by the Local Government Board. In this way the County Councils may have transferred to them many of the powers and duties now belonging to the Privy Council, the Board of Trade, the Local Government Board, the Education Department, and other public authorities. Thus the County Councils may soon become, without further legislation, real County Parliaments, to a seat in which the wisest and most capable of British citizens may well aspire.

J. T. G.

OUR NATIONAL SCHOOL OF HOUSEWIFERY.

SECTION IV. — COOKERY.

HOME-MADE BREAD.



WE are quite ready to admit that it is far easier now-a-days to obtain good, wholesome bread than it was a few years ago, and that it is not necessary to make and bake bread at home in order to insure purity; but as the improved gas-stoves, as well as cooking-ranges generally, afford every facility to those who are

anxious to acquire the art of presenting at table a home-made loaf, we will endeavour to make the process clear to the least initiated of our readers.

A word as to the flour; this, whether white or whole meal, should be of the best quality; not the least of its advantages is that it will absorb more moisture, good flour being dry; hence, in the long run, it is more economical than inferior qualities, which feel damp and sticky, smell unpleasantly, and produce bread only distinguished by its "ropiness;" that is, when cut, it has a "stringy" appearance.

Whole meal bread—which, as its name implies, is made from flour from which nothing has been removed—will, in the majority of cases, be found more agreeable, as well as easier of digestion, if finely ground; sometimes the coarser grain proves irritating to the stomach. A very nice loaf may be made from white flour and whole meal in equal parts, especially suitable for those who hitherto have eaten white bread only, and contemplate the substitution of brown; as the latter will sometimes prove unpalatable if the change be made too suddenly.

Before giving any actual recipe for bread we would impress upon our readers that the following rules must be carried out in order to insure success; that is, so far as fermented bread (made from yeast) is concerned; the unfermented kinds require totally different treatment. Dried yeast, French or German, is now obtainable in most towns; a brand known as "pure rye yeast" is good and reliable.

Rule I.—The yeast must be fresh, sweet, and crumbly, *i.e.*, it should drop from the fingers freely; if it sticks and smells sour it will not make good bread.

Rule II.—Never add water to the yeast without "creaming" it first (as hereafter directed); hot water kills it, and cold water chills it; hence, in either case, its rising properties are diminished.

Rule III.—Pass the flour through a sieve, and in cold weather let it stand near the fire for an hour or two; the vessel used for making the dough in ought also to be warm and perfectly dry.

Rule IV.—The water used for mixing the dough must be tepid, namely, a mixture of one-third boiling and two-thirds cold water; a hap-hazard trial with the fingers is no test at all when accuracy is a desideratum.

Rule V.—Salt should be mixed with the dry flour; if added to the yeast and water it checks the rising.

Rule VI.—A warm even temperature is very necessary during the rising of the dough, for if allowed to get cold it is liable to be heavy, and *too much* heat sours it, and causes it to harden on the surface.

Rule VII.—The exact measure of water that a given weight of flour will absorb cannot be stated, as flour varies so much; but a general rule is a pint and a half for a quarter of a stone of flour.

Rule VIII.—The softer the dough (so that it can be handled easily without sticking) the nicer will be the loaf, and it will remain moist longer than if made from stiff dough.

Now for directions for a trial "batch," which shall be a small one; the ingredients required being half a stone of flour, two ounces of dried yeast, a level table-spoonful of salt, a dessert-spoonful of moist (white) sugar, and tepid water—quantity sufficient, *about* three pints.

Mode.—Put into a large vessel the flour and salt, and make a hollow in the centre, leaving some flour at the bottom—this forms the bed; in a separate basin put the crumbled yeast, add the sugar, and rub them

with the back of a wooden spoon until liquid—this is “creaming”; add the water, mix, and pour into the hollow. Stir in flour from the sides until it looks like thick batter—this is known as the leaven; sprinkle a little more flour lightly over the surface, then cover with a cloth, and leave in a warm place until the top of the leaven is covered with bubbles; the dry flour that was sprinkled over will have disappeared. It ought to have reached this point in about thirty minutes, and is then ready for mixing into dough with the hand. If it leaves the bottom and sides of the vessel quite clean, the consistence is right; but if it sticks, a little more dry flour must be sprinkled round—that is, between the dough and the vessel. Should it need more water, that, like the first, must be tepid. Now turn it out on a clean board, and knead it for a few minutes only; return it to the vessel (either of earthenware or wood) and cut the top twice with a knife, forming a cross; a cut surface always rises better. Again cover, and leave until the dough has doubled its bulk; it will take two hours at least, but good dough ought always, when ready for the oven, to be double its original size. This quantity will make four small loaves; if the dough is full of holes like a sponge, and feels springy and elastic, the only thing to insure good bread is to bake it properly.

First, knead each loaf until smooth all over, not a crack visible, then “shape” either into cottages, rolls, or cakes, or put into greased tins, leaving plenty of room for rising; for cottages, two-thirds for the bottom, and one-third for the top, are the right proportions.

As to the time required for kneading, many people are of opinion that it cannot be too long, but ten or fifteen minutes will suffice if the dough is properly mixed and well risen. The actual process of kneading is not easy to describe, though by no means difficult to acquire; it is a sort of backwards and forwards motion, the knuckles and “ball” of the hand being alternately used. The thing to avoid is flattening the dough; it must be kept round in form, and not allowed to stick to the board; experienced bread-makers can accomplish this without the addition of much dry flour: the less used the better; it hardens the surface, and does not allow it to expand in the oven as it ought. It is a common failing with amateurs, just as in pastry-making, to use too much.

Now to bake our bread: the oven should be hot enough at the commencement to fetch up the dough well, though not hot enough to scorch; a little experience will prove an efficient teacher; when the bread is about half baked, the heat may be reduced; this, in a gas-stove, is very easy. Half-quarter loaves will take *about* an hour and a quarter; when done they will sound firm if rapped on the bottom, besides emitting an unmistakable sweet odour, that underdone bread does not give out.

During the first part of the baking especially, avoid opening the oven door; many a batch of bread, as well as cakes and pastry, has been spoiled by a sudden inrush of cold air.

Although in the foregoing directions we have re-

ferred to dried yeast only, fresh barm can take its place whenever it is preferred, and can be obtained; and, as a rule, about a tea-cupful will be found equal to two ounces of dried yeast.

An excellent plain cake can be made by taking a pound of dough when ready for the oven, and working into it four ounces each of moist sugar, sultana raisins, and nice soft dripping; two ounces of shredded candied peel, and one egg. Put it in a greased tin, which it should only half fill, and let it stand near the fire for a quarter of an hour before baking. If at any time dough is specially made for cakes of this kind, should a quantity be required, milk may with advantage take the place of water in mixing the dough; and by way of variety, ginger or ground carraway seeds—which, by the way, are more wholesome than whole seeds—may be used instead of fruit.

German Tea Cakes are real delicacies in which our readers may indulge on baking-days. To every pound of dough, an egg, two ounces of castor sugar, and three ounces of butter, slightly warmed, are added, the whole being thoroughly amalgamated. This is rolled on a well-floured board, into a sheet an inch thick, then cut into rounds about three inches in diameter, and baked on greased tins in a quick oven. The cakes are split open while hot for the insertion of a little jam, then pressed together again, and the tops dredged with sugar.

Singing Hinnies are German favourites also, and though they cannot be made from dough, we insert the recipe, as it will probably be new to our readers. Mix together a pound of pastry flour, three ounces of corn flour, a small tea-spoonful of salt, two ounces of castor sugar, and two ounces of fresh butter finely rubbed in. Mix into a paste with an egg, a table-spoonful of lemon-juice, and half a pint of cold water. Roll out into an oblong sheet, spread two ounces of lard over two-thirds of the surface, then fold in three, turn it round, and roll out until half an inch thick; cut into rounds or squares, and bake in a brisk oven. These, although usually split while hot and buttered, are very good *minus* butter and eaten when cold, by those whose digestive organs are opposed to hot cakes.

We are indebted to a “Yankee” friend for the following, called *Yeast Gingerbread*; it is exceedingly nice, as well as more wholesome for children than rich cakes. Mix in a large bowl half a pound each of fine oatmeal, ground rice, brown flour and white flour; a good pinch of salt, and six ounces of brown sugar. Melt six ounces of dripping in a pound of treacle, add while still warm (not hot) two table-spoonfuls of fresh barm, a quarter of a pint of tepid milk, half an ounce of ground ginger, and a little ground nutmeg and coriander seeds. Add this mixture to the flour, &c., and when thoroughly amalgamated, cover, and leave to rise for an hour or more, then bake in bread-tins in a *slow* oven until a skewer will come from the centre perfectly clean.

In conclusion, we would urge our readers to try again if their first batch of bread is a failure; though, if they carry out our hints to the letter, success *ought*

to crown their efforts. As before stated, unfermented bread is differently made, and although the limits of the present paper do not admit of its treatment, we may point out that it is not so wholesome for everyday use as fermented bread, neither is it so satisfying or economical. There are many varieties, the most common being that made from baking powder; this is useful when bread is wanted in a hurry, or a change required in the shape of fancy bread, including scones, &c. It *must* be made quickly to be worth eating; the actual mixing, shaping, and transference to the oven should not occupy many minutes. Some may say, "Why is this?" Just because the fermentation should not commence until the bread is in the oven; it quickly ferments, and as quickly subsides; small loaves, for this reason, will be more satisfactory than large ones; they require a very sharp oven, and should be left on a sieve to cool—never taken at once into a colder atmosphere.

L. HERITAGE.

** Our readers are reminded that, according to the curriculum published in December last, February 11 is the day on which the loaves, sent in competition for our prizes, are to reach us.

PASS LISTS. (SECTION I.)

HOUSEHOLD ROUTINE.

The First Prize of One Guinea is awarded to AMY NEWMAN, 3, Harrow Villas, Harrow Road, Harlesden, N.W.; and the Second Prize of Half-a-Guinea to CLARA THORNHAM, Studley House, The Park, Hull.

CERTIFICATES OF HONOUR.

Name.	Address.
Cobb, E.	Tunbridge Wells.
Fox, C. E.	Bideford.
Henry, May	West Hampstead, N.W.
Norris, C. M.	Somerset.
Osborne, Annie	Regent's Park, N.W.
Wassell, Rosalie	Bradford.

CERTIFICATES OF MERIT.

Name.	Address.
Biggs, Edith J.	Manchester.
Briggs, Lucy H.	Manchester.
Cooper, Miss... ..	Edinburgh.
Gardiner, Florence M.	Leicester.
Gordon, Laura	Brixton, S.W.
Hedgecock, Emily	Rochester.
Horan, Elizabeth H....	Rathkeale.
Parker, Kate	Glasgow.
Porter, Charlotte A.	Bridlington Quay.
Raper, S. J.... ..	Thirsk.
Robinson, J. A.	Kirkham.
Russell, Gertrude M.	Ipswich.
Stevenson, Ellen	Sheffield.
Thomas, Sarah	Bristol.
Turner, Annie C.	Luton.
Wales, Amy H.	Upper Norwood.
Winter, Julia	Hornsey Lane, N.
Wright, Annie E.	Forest Gate, E.
Yates, Annie	Stockport.

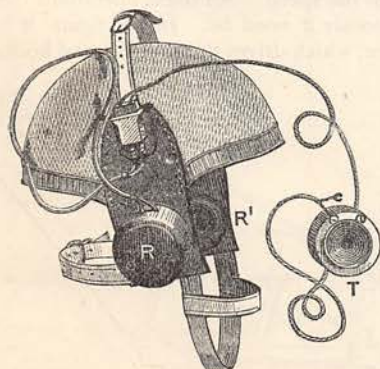
The successful candidates may have their Certificates posted to them, on their sending to the Editor a fully-addressed label, together with two penny postage stamps, to defray cost of postage and roller. The Editor cannot be held responsible for loss or damage to Certificates in the post, nor can he answer inquiries respecting unsuccessful work.

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AN ILLUSTRATED RECORD OF INVENTION, DISCOVERY, LITERATURE, AND SCIENCE.

Correspondents are requested, when applying to the Editor for the names and addresses of the persons from whom further particulars respecting the articles in the GATHERER may be obtained, to forward a stamped and addressed envelope for reply, and in the case of inventors submitting specimens for notice, to prepay the carriage. The Editor cannot in any case guarantee absolute certainty of information, nor can he pledge himself to notice every article or work submitted.

The Diver's Telephone.



but it can be fitted into a recess in the helmet near his mouth. R and R¹ are two receivers, fitted into

the sides of the headpiece at the diver's ears, thus enabling him to hear what is spoken to him without using his hands in the process. The arrangement leaves him free to work or defend himself while under water.

A Chemical Island.

According to Mr. MacIvor, a New Zealand geologist, the White Island, in the Bay of Plenty, is part of the crater of a submerged conical volcano. The whole of it is evidently of volcanic origin, and it contains much sulphur. Curious hollow spheres of gypsum and sulphur are found on the island, and in its midst is a lake whose atmosphere is very irritating through the evolution of hydrochloric acid gas. In connection with this subject it may be stated that a project is "on the cards" to tunnel through the volcanic crater of Popocatepetl in order to reach the stores of sulphur contained in it.