## OLD BREAD AND NEW.



IAT is there to tell about a loaf, when all of us know so well what it is like, and are quite aware that it is composed of sweet white wheat, ground into flour, mixed into a dough, then baked in an oven, and sold for a few pence to any one who wishes to buy it? Yet, if we trace the history of an English loaf, we shall find that it was not always quite the same thing,

for in the good but rather hard times of the Middle Ages our peasantry, and indeed most people, lived on very different fare from what they do now; the best white bread, called "simnel bread," or "pain demayn," being only consumed by royal or very rich persons. More ordinary folks ate "wastel bread," and "cocket," which last owed its odd name to the baker's "cocket," or seal, with which he was by law obliged to mark each loaf he sold. Then came still commoner kinds: the "tourte," made of unbolted meal; the "trete," a brown loaf, made of meal once bolted; then "all sorts," a dry sort of black loaf; "house bread," and others composed of oats, rye, barley, peas, and beans, or mixtures of these. Piers Plowman, who wrote in the fourteenth century, talked of "a cake of oates, and bread for my bairns of beanes and peses," as a countryman's ordinary fare. To this day the use of "otes and peses" is common enough in the North of Scotland and Ireland, where the peasantry eat little else than oatmeal cakes, and pease bannocks or cakes -the children grow strong and sturdy on the porridge, crowdie, and stirabout, which they get at every meal.

In those old days, when public bakers were more looked after than they are at present, they were only allowed to make farthing or halfpenny loaves, under risk of a heavy penalty. They were also obliged to stamp each loaf sold with a registered seal, which was examined by properly appointed persons once a month; and still further to prevent cheating, sample loaves were taken hot from the ovens by assay officers, called "hutch reves," who came at unexpected hours and closely examined and reported on their quality. These ancient London bakers might not sell their loaves in their own shops or houses, but must carry them to the king's market, where the bread was exposed for sale in large boxes, or in baskets called "panyers." For this privilege the baker paid the king a toll of one halfpenny for week-days, and three-halfpence for Sunday trade-remember, the day was differently kept and thought of then from what it is now. The whole arrangement must have been very awkward for those buyers who lived at a distance from the market, and so the master baker had permission to hire hucksters, who carried his loaves round to the different customers, and who were allowed by law to claim thirteen to the dozen. You

have heard of a baker's dozen, no doubt, the odd one being their profit.

Of course, many private persons made their own bread at home, and baked it as best they could, or they might send it to be baked at the regular bakers' ovens; they might even go themselves, or send their servants, to the bakehouse, to watch over their loaves.

When we mention the baker's loaf of to-day, we naturally think only of the quartern, half-quartern, tin, cottage, or fancy loaf, all alike made of white wheaten flour. Yet the modern English law concerning bread mentions that many other things besides wheat may be employed in its composition. It is especially stated that bread may be made of flour or meal of wheat, but it also adds that barley, rye, oats, buckwheat, Indian corn, peas, beans, rice, potatoes, or any of them may be used, mixed with pure water, common salt, eggs, milk; barm leaven, potato or other leaven, may be added as the baker sees fit, but no other ingredients whatever are to be used under pain of fine or imprisonment.

Before proceeding to understand the nature and uses of others of these "bread-stuffs," so solemnly mentioned by our laws, let us take up a handful of wheat and ask what it is. A simple enough question: you will answer it by saying, "The seeds of a kind of grass." Yet that is not quite correct, for any botanist will tell you this seed is really a fruit, which in its ripe state is enclosed in a shell or husk, corresponding with the loose pod of a pea or bean; this husk, which is of a much finer substance than the fruit it protects, is proof against moisture, through some kind of varnish or glaze which forms part of it. During the process of grinding, this natural overcoat will be separated, together with the other outer layers of the fruit, which is itself composed of tiny cells, closely filled with granules of fine starch. The layers, when ground, will form the soft, fluffy, and once despised substance known as bran.

The best white bread is made from the fine flour, "the very heart of corn," obtained by a first grinding. Good wholesome "seconds," or ordinary household bread, is a compound of the first and second grindings; the third making a very poor loaf indeed. Brown bread is a mixture of "first," "seconds," and "whole meal," that is, the produce of a first grinding just as it leaves the mill-stones: a coarse compound of flour and bran, which is generally considered very wholesome, because of some resinous matter hidden in the outside layers or bran of the wheat. The Germans make a bread called "pimpernickel" from wheat as it leaves the mill-stones after its first grinding.

Now that our sack of wheat has become a sack of flour, and is on its way to the baker, who is to transform it into dozens of sweet white loaves, let us just consider what this flour is composed of; for, like everything else we eat or drink, it contains several things which some of us would scarcely expect to find in it: among the rest, water and fat, but more

especially farina or starch, and a kind of sticky vegetable glue, called gluten, which, though very different in appearance, has chemically some resemblance to the flesh of animals. Without this gluten, the flour would not form into loaves. Perhaps I might make you better understand what it is, were I to tell you of a very old experiment by which you can easily detect it for yourselves. Mix up a good lump of stiffish dough of flour and water, then wash it as thoroughly as you can with clear cold water. You will soon see that this water, when it has drained away, has not melted the dough into a paste, as you might have expected it would do, but has itself become milky-looking, with a thick sediment. This milkylooking water is called "extractive," and the sediment is pure starch; as to the dough, it has become a moist sticky substance, which can be pulled and twisted about like some kind of well-soaked india-rubber. This is the gluten, and it is this sticky quality which is so useful in keeping thoroughly together the fine powder grains of starch, each little speck of which gets coated with it, and is so enabled to hold together while the chemical action is going on evenly throughout the whole mass.

Let us see what becomes of the flour when it reaches the bakehouse.

First having seen to his oven, the baker fetches a good supply of water, and adds it to some brewer's yeast, or leaven; perhaps it will be as well to mention that this yeast is ground malt mashed in hot water, which is boiled with hops. Flour is gradually mixed with the wort so produced, which soon begins to froth and ferment. When this has subsided, the mixture is strained and ready for use. (Leaven is merely old dough in a state of fermentation). To the water and yeast he adds a little salt, which improves it, and with this he kneads the flour into a dough, turning and rolling it about with all the strength of his bare hands and arms, until the whole forms a stiff ropy mass-"sponge," he calls it-which he presently puts in a warm place, and leaves to "set." In a very little time this "sponge" shows signs of deserving its name; for, just as a dry sponge would do if you damped it ever so little, so the yeast in it begins to act on its surroundings: the whole mass of dough gradually swells and puffs, and fills with little bubbles. In a short time it is all in a state of active fermentation, caused by the carbonic acid gas which is working about in it, and filling it out in such an odd way. When the baker thinks it has spread and puffed enough, he adds more flour, water, and salt, and gives the whole another thorough good kneading, which is to prevent any portion of it from becoming heavy or "sad;" then he puts the big, soft, yielding mass of dough in a warm place, where he leaves it to spread and distend for some hours: and here the baker shows his judgment, for if he leaves it at all too long it will be sour, and if he takes it away too soon his bread will be heavy and unwholesome. When it has had its own way for long enough, he again attends to his still uneasy dough, weighing it out into equal lumps, which he pops on his oven-floor to bake and brown into quartern

or half-quartern loaves. Other lumps he will put into tins, where their "rising" propensities will soon be checked by the hot breath of the same dark receptacle.

When, by-and-by, he draws out trays and tins, the baker can easily test the quality of the loaves they contain, for if it is good "piled" bread he can detach pieces of it, crumble them into coarse powder, or make them into a smooth even pap. And I may as well tell you one of the baker's secrets here, which is that he has most likely added potatoes, well boiled, steamed, and fermented, to his dough. This does no harm, except that they are not as nourishing as the flour they represent. Sometimes he even puts alum to make inferior flour look a better colour, but as it also causes it to absorb too much water, the batch will be hard and indigestible.

There are plenty of reasons why many persons object to ordinary bakers' loaves, and prefer aërated bread, which is a kind quite untouched by hands that possibly are not always very nice.

We have said so much about wheat; let us now mention some of the other bread-stuffs by law allowed -namely, barley, oats, rye, buckwheat, Indian corn, beans, peas, potatoes, and rice. Among these, barley certainly claims the foremost place as the grain which formed one of the chief supports of the people of civilised nations, from the days of Ezekiel to those of Cæsar's Roman soldiers, or our own Saxon forefathers. Has not tradition told how the burning of a barley loaf cost great King Alfred a severe box of the ears, from the over-ready hand of an irate neatherd's wife, whose loaves, or rather cakes (for, as barley contains no gluten, it cannot be worked into a light-enough dough), no doubt exactly resembled those still eaten in Siberia, the north of Germany, Sweden, Norway, and even in parts of Ireland and Scotland. It is chiefly cultivated in England for the use of brewers, who steep it in water until it becomes malt; being again steeped and boiled with hops, it forms beer, or, as its Northern name signifies, "barley wine."

Then come oats, prettiest and hardiest of all cereals, flourishing where wheat and barley droop and die, seeming to prosper all the more for bad soil and inclement weather. It does not make very palatable bread, and soon turns heavy and sour. Yet it is much used in Scotland, that "land o' cakes," where oats, being coarsely bruised, and kneaded with water and salt, are formed into little flat loaves, or cakes, and baked on an iron plate or girdle. Here, too, as I have mentioned, besides the "otes," the poorer folks still make bannocks, or cakes, of "peases" dried and ground into a powder and baked on the hearth, after the fashion of the Arabs, or of our long-ago ancestors.

There is little need to describe the other things by law allowed, as few of them are now used by our bread-makers. Rye, which, ground into a coarse meal, and fermented with leaven, forms the ordinary black bread of the Northern peasantry, is now mostly used in England by distillers; buckwheat, by farmers, for the feeding of game and poultry; and Indian corn or maize, which is especially the bread-corn of the

United States—with us, it is, as flour, more used for puddings, and whole for poultry, horses, and cattle, which thrive famously upon it, as it contains much nourishing oil.

In the old days when bread was dearer and scarcer than it is now, many charitable persons left-money to be spent in annual gifts or "doles" of bread for the poor. The Biddenden Dole, for instance, was the legacy of the twin sisters Preston. They left a piece of land long known as the "bread-and-cheese land;" all the rents derived from which were to be

spent in bread and cheese, to be given to the poor. Three thousand of these "Biddenden cakes," bearing the impress of the donors—who, tradition averred, grew fixed side by side—were to be flung from the parish church roof every Easter Sunday, and they might be scrambled for by all who came. It was also the custom to fling loaves, to be scrambled for, from other churches, on the Thursday after Easter—a very curious fashion, which no doubt arose from the old "largesse" of the rich to their less fortunate neighbours.

## A GLIMPSE OF NORWAY.

BY C. F. GORDON-CUMMING.



NORWEGIAN PEASANTS.

by a cordial invitation from most pleasant friends, who for several vears have rented a river Norway, in there to enfirst-class salmon-fishing, we started from England in the early summer, and reached Bergen ere the snows had altogether melted on the higher levels.

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Our drive across country

to Christiania was not an unmingled delight, for, though the sharp wind blowing across the snow was keen and cutting, the hot glare skinned our faces, and we voted the solitary drive in little carioles, each carrying only one person, decidedly dull.

As the season advanced, we revelled in the abundance of exquisite wild flowers, especially the fields of lily of the valley, which grows in rank profusion throughout Southern Norway. Its blossom is larger than that of the English lily, and its perfume is heavenly. It grows in masses in the crevices of almost bare rock, and scents the whole air, mingling with the fragrance of ground-orchids of various sorts. There were also quantities of yellow violets and gay anemones, and a great variety of beautiful ferns. But most exquisite, and to our eyes most rare, was the carpet of delicate Linea Borealis, that most fairylike tiny pink bell, hanging from its light hair-like stem: the darling of these northern regions, of which a few rare plants have colonised in Scottish fir-woods, and there flourish year after year, always on the same

small patch of ground, never spreading, but happily never diminishing.

Early in July we made our way northward by fjord steamers and railway to Trondhjem, where we secured our passages in a coasting steamer which carried us north to Vefsen, which was the nearest point to our friends' fishing quarters. The two days' voyage was not unpleasant, and afforded us an opportunity of fraternising with some kindly Norwegians. The service of the table afforded us some amusement, each person being provided with a dozen little dishes containing various dainties—little bits of kippered salmon, a few sardines, slices of Bologna sausage, and divers other entre-mets.

At Vefsen we were met by our friends' boats, which took us twelve miles up the river, through very pretty, quiet scenery. The foot-path along the river was not inviting, being rough and swampy. The only road in the district where a wheeled conveyance could possibly travel is a short bit near the house; and the only vehicle which travels over it is a rough-and-ready cart of the simplest construction, being merely a platform on two wheels!

The river is very rapid and very blue—its waters exquisitely crystalline. It flows through fine fir-forest extending over a vast tract of country, beast-haunted. As yet these forests continue beautiful, but, alas! they are being rapidly felled, and that, too, in a manner which seemed to us wickedly wasteful, for, as the trees are felled in winter, it follows that they are cut on a level with the snow—that is, at least two feet above the ground. Shorn of their boughs, and reduced to mere prosaic logs, they are each branded with the name of their owner and thrown into the river, to find their own way sea-ward. Below the rapids they are collected and tied together so as to form rafts, and are then guided to their destination.

Leaving the boats, we ascended the river-bank by a steep zig-zag path, and soon were welcomed to our friends' tishing home, recently built by themselves, as they had hitherto lived in a little brick-floored Norwegian farmhouse. Now they rejoiced in a two-storeyed house, with a verandah at one end, built of wood, as all houses are in that part of the world.