

Your Daily Loaf of BREAD



Where It Starts, and the Steps by Which It Approaches Your Table - The Complex Processes of the Bakery - Breads of Different Kinds.

By ROBERT TIGHE

Not long ago every household was a little factory, producing much of what it consumed, its output even including the clothing of the family. Its kitchen was incidentally a bakery, making all the bread required in the home.

Look back only sixty years, to the period just before the outbreak of the Civil War, and you find that there were then few bakeries even in the largest American cities. People made their own bread.

Early in the Civil War a huge government bakery was established in the basement of the Capitol, in Washington, to supply the Army of the Potomac. Bakers were needed to operate it, and, to get them, Uncle Sam rounded up in New York a number of French and Austrian immigrants who had a knowledge of the art.

These Frenchmen and Austrians made a kind of bread that was entirely new to the soldiers, who liked it so much that, when they went back to their homes, they insisted on having "twist" and "Vienna loaves." This led to the opening of many bakeries by German and French people.

Since then the bakeries have steadily driven the home breadmaker out of business. Some American families still cling to the habit of baking bread in their own homes, but even they, in the West, find it convenient to send to nearby corner grocery for several loaves each week.

A Bread Factory

The up-to-date bakery has grown and expanded into a large factory with elaborate and expensive equipment of machinery. It may supply a whole town with bread. If located in a city, it has for customers several thousand families, to which it delivers daily

loaves, and this service is supplemented by distribution through hundreds of grocery shops. The fundamental material of bread is, of course, wheat. No other grain is a satisfactory substitute. During the war trial was made of all sorts of things—everything short of sawdust, one might say—but, though some of them proved available for admixture with wheat, the results were not very palatable. It is not only that wheat tastes better, but that it is the only grain which contains gluten, and which therefore will make a "rising" loaf, the gluten holding fast the bubbles of carbonic acid gas generated by yeast.

All of our grains are seeds of grasses. Corn is a grass native to America. Wheat, oats, barley and rye are Old World species. Likewise rice. But wheat is queen of the grasses.

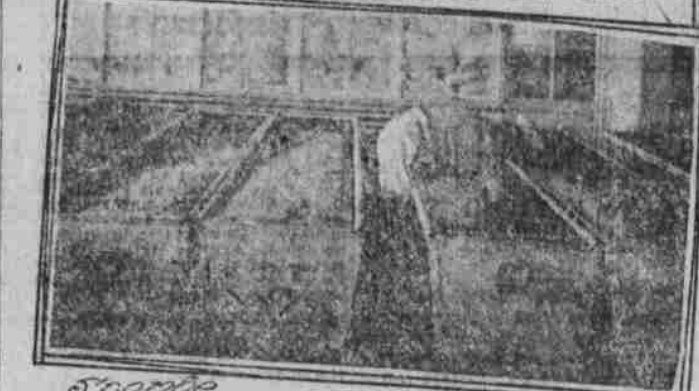
Our wheat comes mainly from the Middle West, where in the growing season it covers whole landscapes as far as the eye can see. Improved agricultural machinery deals with it in so wonderful a fashion that the labor of two men will produce enough of the precious breadstuff to feed 1,000 people. From the fields most of the grain goes to huge mills in Wisconsin and Minnesota, where it is ground, "bolted" (to remove the germ and outer husk of the seed), and, in the shape of flour, bagged for market.

Making The Flour Ready

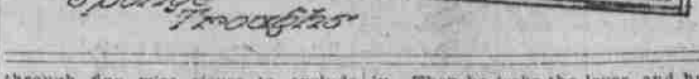
The flour comes to the city bakery in big sacks. Most bakers use three-fourths spring wheat (spring planting) and one-fourth winter wheat, which is planted in the fall. They must, of course, be thoroughly mixed by machinery, and the mixture, passed



Indian Pouring Mesquite Beans for Bread



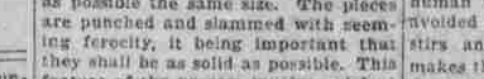
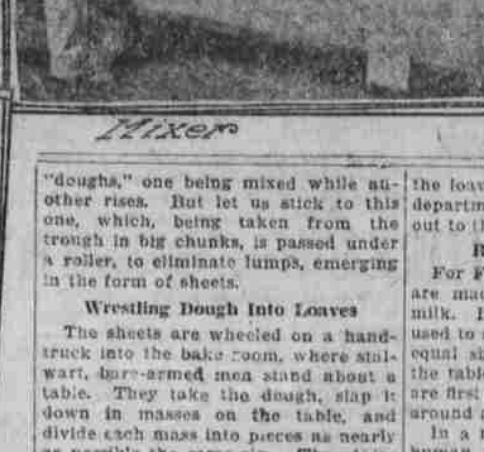
Mixer



Sifted Flour

through fine wire sieves to exclude lumps, is then ready for use. The bread-making flour is immediately below that on which the mixing is done, and from the tank containing the prepared flour a pipe extends downward through the ceiling in such wise that its mouth opens directly above a huge iron tub. The tub is a dough tub, and when it wants flour, the operator pulls a lever, and down comes the stuff through the pipe from overhead.

This, however, is not the beginning. The first thing the baker does is to pour into the tub a quantity of yeast that has been dissolved in water. He adds to this many gallons more of water, and starts in motion a revolving scoop which mixes the fluid thorough-



Shaping Loaves

ly. Then he jerks the lever, and hundreds of pounds of flour pour down into the tub. Again the revolving scoop, run by a belt, is set in motion, to mix the flour with the water and yeast. The result is a sticky stuff called "sponge," which the operator dumps into a big trough, the iron tub being set on pivots so as to turn over easily. There he leaves it for three hours, to rise.

Then he puts the sponge back into the tub, and adds several pounds of sugar and lard, a whole lot of milk, and a good deal of water. Again the scoop starts revolving, and when the mass has been well stirred, it is dumped once more into a trough and left to rise two and a half hours. The dough is now finished. A day's work for the baker makes a series of



Battery of Baking Ovens

"doughs," one being mixed while another rises. But let us stick to this one, being taken from the trough in big chunks, is passed under a roller, to eliminate lumps, emerging in the form of sheets. The sheets are wheeled to the delivery department, where they are handed out to the wagon-drivers.

Rolls Richer in Material
For French rolls separate "doughs" are made, richer in lard, sugar and milk. In making them, a machine is used to stamp the dough into lumps of equal sizes. Those which appear on the table in the familiar folded shape are first rolled into balls and then bent around a small stick.

In a modern bakery the contact of human hands with the materials is avoided as far as possible. Machinery stirs and mixes the flour, and it makes the sponge paste, and it turns out the final doughs. Hands are used only to give the dough a last kneading-shape the ovens, put them in the oven, and take them out again.

For many years it has been accepted as fact that our white bread, though more palatable, was less nutritious than bread made from whole wheat flour. People, therefore, have been encouraged by physicians to eat "granum" bread, which contains far valuable nitrogen of the husk and germ. But experiments by the Nutrition Division of the Department of Agriculture have proved that, quantity for quantity, whole-wheat bread makes less flesh and blood, and puts less fuel under the human boiler, than white bread—the simple reason being that the whole-wheat bread is not so thoroughly

digested. As for the nitrogen, we get all we need of that from meats. Few people know that Boston brown bread, now esteemed a luxury, was originally a famine food. It was invented by Major Nathaniel Thwing, of Boston, in 1746. There was then a great scarcity of cereals in New England and Thwing, who was a baker, got permission from the select men of the town to make a bread of cornmeal, rye flour and molasses, with sour milk and soda. Eight-pound loaves were sold for 3 cents. Today the same recipe is used in Boston for making brown bread, which, put up in millions of cans annually, is distributed all over the United States.

Loaves of bread 3,500 years old have been found in Egyptian tombs. They looked as if charred by fire, this effect being due to slow oxidation. Microscopic examination proved that they were made of emmer, which is related to wheat, and dead yeast cells were discovered in their substance. Yeast in early days was called "leaven". When the people of Israel were wandering in the wilderness, they had no yeast, and so we read in the Bible, they ate unleavened bread.

Queer Kinds Of Bread

Many things other than wheat of grain are used for making bread. In California, for this purpose, the Indians gather great quantities of sorghum growing on the cornfields to make, which is added to water to remove the bitter taste. Another bread is made by the cowboys of Utah, and is made of the tough-necked horseweed leaves. A square pound of these breads is a very nice mortar. Then she takes from her head her comical hat, sprinkles it with water, puts in a little of the meal, then more water, then more meal, and so on until the hat is full. This accomplished, she exposes the hat to the hot sun, which bakes the contents into a solid and nutritious loaf.



Jean Calhoun and Tony Moreno in "Three Sevens"

"Boys Will Be Boys" - A Peer Among Screen Mothers - "Three Sevens" - A Vanity Fair Girl - "Lure of Youth" - Starts As Leading Man - A New Star.

BOYS will be boys," concerns the adventures of Peep O'Day (Will Rogers), before and after he falls heir to an Irish peerage fortune. The action occurs in a little Kentucky village.

Peep O'Day is a good natured, steady and mysterious Irish hostler, peep and abused. He suddenly falls heir to a fortune in Ireland and his first thought is to enjoy the boyhood which he has never had. He consequently plays all sorts of hokey games to the neighbors think he is crazy. Sublette (a crooked lawyer), uses this as a hook upon which to hang a plot with which to get Peep O'Day's fortune. Lucy (Irene Rich), the sweet young school teacher, in love with the young town lawyer, undertakes to teach Peep O'Day his lessons in the school house. Mrs. Hunter, the willing widow, also out for Peep O'Day's money, sees them there and starts a scandal. Sublette and his accomplices import Kitty from Louisville to impersonate Peep O'Day's cousin. She is a good hearted southerner and in a court house scene which closes the story comes out strong for Peep O'Day and shows up Sublette and his gang.

All ends well and the character of Peep O'Day gives Rogers an opportunity to display his peculiar and personal humor in several new directions. Irene Rich as "Lucy," maintains her standards of ability and charm.

Margaret Mann

This is the era of screen mothers. When Margaret Mann took the role of the mother in "Heart of Humanity," she inaugurated a new epoch in screen history. Up to that time characters in film plays had been pushed into the background. But Mrs. Mann's remarkable characterization and emotional talent appealed so strongly to the public that she was one of the chief at-

tractions of this production. She scored another hit in a similar role in "Once to Every Woman," starring Dorothy Phillips, and is now taking a mother part in Eva Novak's current photodrama, "The Girl and the Goose." Mrs. Mann came to this country from Scotland six years ago and started her American screen career at Universal City.

Antonio Moreno And Jean Calhoun
In "Three Sevens," Tony Moreno leaves the serial field and returns to the romantic photoplay. He plays the role of a youth who is unjustly accused of murder and sentenced to 10 years at hard labor. While in prison he and several other convicts succeed in freeing themselves and ousting the villainous warden. "Tony" in the character of the hero then proceeds to hold a court to give the convicts a new trial. On this remarkable situation the story of "Three Sevens" develops in an entirely new angle in the way of a film story. A love, romance and tragedy run a merry race in making up the elements of an altogether different photoplay.

Jean Calhoun, as leading woman in the character of Joan Gracie, is bandaging his wounds.

Harold Goodwin

Harold Goodwin, a new star, has behind him, at the age of 18, a record of six years of persistent effort in motion pictures—part of this time as leading support for prominent stars. Goodwin's first picture as a star is "Oliver Twist, Jr." The story follows closely the famous novel by Charles Dickens—which all the world has read. The film version, however, differs in this way: The story of Oliver Twist is brought to date, the locale is shifted to the United States, and the Dickens characters are seen in modern

Among the MOVIE STARS



Harold Goodwin in "Oliver Twist, Jr."



Norma Nichols

clothes, moving amid scenes of today. Norma Nichols made her debut in the film via serials. She appeared with Ruth Roland in "Ruth of the Rookies." After that the film fans wanted to see more of Norma and they are now having the opportunity. For at the present she is a featured



Irene Rich



Will Rogers and Irene Rich in "Boys Will Be Boys"



Harold Goodwin and Cleo Madison in "Lure of Youth"



David Winter

number of the Vanity Fair Girls—six carefully selected California beauties who bring joy to the heart of the T. R. M. by their antics in these new comedies. And Norma, we might say, is the very life of the party.

Garth Hughs and Cleo Madison
The regeneration of a man's character through a woman's sacrifice is

the basis of "Lure of Youth." Florentine Fair is a famous actress, faded of the footlights, who goes to recuperate in a stagnant little town, at the suggestion of Mouten Mortimer, a rich admirer, bent on becoming her lover.

She enters a drug store to purchase rouge and is spoken to in French by the clerk at the counter. Pleasantly surprised at the unexpected circumstance, Florentine invites the young man to her home, and Roger Dent arrives bringing a play he has written. His reading first bores and then inter-

ests her. Roger becomes her protegee and is brought to New York, where he progresses. Mortimer, angered, accuses Florentine of playing with the

lives of genius, and blackens her character in the eyes of Roger's parents. They enter her apartment and accuse her of being an adventuress leading their boy astray. Roger refuses to return home.

Then, quite suddenly, he voluntarily comes back, embittered at the destruction of his youthful illusions. What changes his decision and threatens to break his career results in a tremendous situation in this fascinating drama of love and ambition.

David Winter, new leading man for Katherine MacDonald, Winter broke records for breaking into the movies by starting as leading man to the most beautiful woman of stage or screen.