

Baking World's Oldest Industry; Known to Caveman

PROGRESS MARKS MANKIND'S RISE AND DEVELOPING OF CIVILIZATION

Crude Attempts to Grind Flour Began With First Knowledge of Wheat; Then Came Loaves.

BY ROBERT E. STERLING

An ancient Hebrew law, as old, perhaps, as those announced by Moses, forbade that any man should "take the upper millstone to pledge, for he taketh a man's life to pledge."

Even when this was written in emphasis of the vital necessity of the mill for grinding grain into flour, milling already was centuries old.

There is evidence that wheat was known and cultivated in the Paleolithic age. Certainly it antedated by thousands of years any historical record.

Among the Egyptians and Greeks, wheat was regarded as a gift of the gods. When Elijah was fed by the ravens it was bread they brought to him and later, when he was left to the tender mercies of the widow of Zarephath, it was from a handful of meal in the barrel and a bit of oil that she made him cake at the Lord's command.

Samson was one of the first millers of Biblical history, being fettered and made to grind flour while in prison.

BEAT GRAIN INTO FLOUR
With the earliest knowledge of wheat began mankind's crude attempts to grind the seed into flour and make the flour into the loaf. At first and for many thousands of years he could only place the grain upon a stone and beat it laboriously with a smaller stone held in his hands. In time the bed stone came to have a cup shape.

The name of the discoverer of the phenomenon that the process could be hastened and the meal finer by giving the grindstone a rotary motion never will be known. Yet he was one of the greatest inventors of all time, the Edison of his age and the author of a thousand processes in modern industry.

SADDLE STONE INVENTED
Later, in the evolution of centuries, came the saddle stone, probably first used by the Chinese and later the operator sat behind the bed stone, which was slightly tilted, and worked the grinding stone forward and backward. It was found from this and a smaller, usually round, stone that the two women were grinding when the one was taken and the other left.

Grain was chiefly ground in the household, but often in the case of Samson, was produced in prisons. Gradually, with the Greeks and Romans, it came to be milled in a commercial sense, usually as a part of the business of baking. The rotary mill existed in crude form among the Greeks. The quern, with one stone revolving upon another, first was used in the early dawn of the process of today, by water and wind.

SOUGHT WHITE FLOUR
Through all of this growth of milling over a period of scores of centuries, man's constant effort was to produce finer and whiter flour.

Following only his own desires, he unconsciously was contributing to the creation of the fine, white nutritious loaf of today.

It is an interesting fact that through all the ages, the quality and whiteness of the bread eaten almost exactly parallels the advance in civilization.

Today fine white bread is uniformly demanded by the most enlightened nations, while backward peoples are content with coarse textured and dark-colored loaves. Even in China, which we often regard as backward but which is the world's oldest civilization, the finest and whitest flour is demanded. Perhaps this is because the Chinese regard wheat as a special gift from heaven itself.

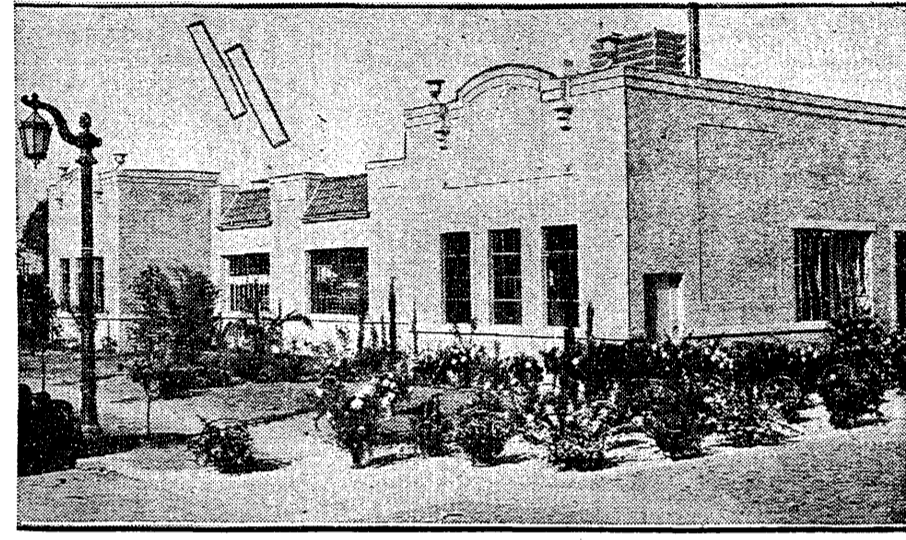
MODERNS TURN BACKWARD
It is only in comparatively recent years that some of our ultra-moderns have demanded that we turn the clock back and eat coarse, dark bread for health's sake. They believe, or seem to believe, that the closer we get to nature, the fuller we will be

of vitamins and other curious things. Largely they prove their faith by experiments on white rats and other beasts.

The truth is that the outer coating of the wheat berry is almost completely indigestible, a wise provision of Nature to insure that, even if every grain in the world should some time be eaten, a large part of it would be returned to Mother Earth, germinate and insure new harvests. Cows can digest the branny coating of wheat because they have a number of stomachs and an intestinal tract twenty-five times the length of their bodies. In the same way the giraffe eats and digests the limbs of trees, because it has a neck long enough to reach them and a digestive tract a hundred times the length of its body, neck included. But the elementary canal of a man is but seven times the length of his body, and he is as completely unable to convert the whole wheat berry into nutriment as he is to digest the shell of a cocoon.

Two Homes of Butter Cream Bread

The two homes of Butter Cream bread. Top—Cramer's Bakery at 1955 Julian avenue, and below, the Cramer plant at El Centro, which was opened December 6, 1929, less than two years ago.



Richmond, Va., a little later came to be the country's most important center of flour milling, being succeeded as the years passed by Rochester, St. Louis, and finally Minneapolis, which today is the world's greatest producer of flour, being followed by Buffalo and Kansas City.

While the little water mill of our own earlier years and of our fathers and grandfathers largely has disappeared, and we today have great mills

capable of grinding as much as 25,000 barrels of flour a day, milling processes still are exceedingly simple and the milling industry itself is hardly more than a step beyond the farmer's threshing machine.

PROCESS REMAINS SAME
Despite the apparent marvel of the change from the brown hard coated wheat berry to the beautifully white and fluffy flour, the process of today is hardly more than a glorification of

what the slave did before the saddle stone. The greatest advance probably is in the superlative cleanliness of the process and the completeness with which the inedible parts of the wheat are removed. First of all, the wheat as it comes to the mill is scoured over and over again; in many mills it is even washed with water and dried with currents of purified air. Then comes the grinding and sifting and regrinding and resifting.

with aeration after each detail of the process, so that finally all of the hard shell, all of the dirt from the little crease in the wheat berry and all of the greasy germ, which would if left in, cause flour quickly to become rancid, are eliminated. There is left finally only the superlatively pure, fine flour which is the joy of every housewife and without which the wonderful loaves of the modern baker would not be possible.

Cramer Marvels at Quality of Bread Mother Used to Bake in Kitchen Oven

(Continued from Page 1)

exactly the right temperature with the right humidity in every process; with automatic scales to measure each of the ingredients that goes into a perfect product.

Cramer's electrically operated bakeries are clean and modern. The flour is poured into large bins and is carried by electrically turned endless screws up shafts and sifted into an automatic scale hopper, from where it is dumped when the required amount of weight is secured. The enriching ingredients such as yeast, sugar, milk and shortening are also accurately weighed or measured, so that every mix is exactly according to prescription.

The dough is then mixed in the electrically operated mixing machine to a specified length of time controlled by a timing device.

DOUGH CAN'T REST
Thermometers record the temperature of each dough. Only by part accurate control of mixing time and temperature can uniform results be had. So accurate are all of these operations that rarely is a batch of dough one degree too warm or too cold. To give an idea of the immensity of these operations the troughs (mother's trough was usually the dishpan) into which these 1000-pound doughs are placed for fermentation, average 10 feet in length, by about two feet in depth and two feet in width.

The dough is now placed in the fermentation room which is kept at 80 degrees, and there is just enough humidity (moisture) in this room to prevent the doughs from crustling. Mother used to carefully cover her doughs with cloths and put them in a guarded place which corresponds to the above procedure.

GOES TO DIVIDER
After the dough has been properly fermented it is put into a machine called a "divider," which cuts the dough into individual pieces of equal weight. The pieces are then carried on a belt and dropped into the bottom of a cone shaped, rotating cylinder, called a "rounder." A spiral runway is on the inside of this "rounder," and the centrifugal force causes this piece of dough to follow this spiral runway and emerge from the top in a perfect ball.

This ball of dough now needs a resting period, and from the "rounder" it is placed into small aluminum buckets which deposit this rounded piece of dough into the "proofer." "Proofer," by the way, in bakery language means "rising."

This proofer is equipped with endless canvas belts which carry these rounded pieces of dough back and forth for about 10 or 12 minutes in order that they become light enough to be properly shaped when deposited into the "moulder." The "moulder" is the machine which gives the loaf its final shape before being placed into the pans in which it is baked.

GETS FINAL RISING
The pans of shaped dough are now put on racks and run into the "proof box" where the dough gets its final rising before being placed in the electric trailing ovens.

GROGERS SERVE BUTTER CREAM BREAD AT HOME

When the child or the stranger asks the grocer for "a loaf of bread" in the majority of cases the grocer hands this new customer or this wee customer a loaf of Butter Cream Bread.

Why? Because he wants the new customer to come back. Or he wants to assure the mother of the child that he is not taking advantage of her absence. He knows he is pleasing both when he sells Butter Cream Bread.

And how does he know that it will please? Because he serves it on his own table.

The majority of grocers in San Diego and Imperial counties in California and Yuma county in Arizona serve Butter Cream bread at home to the exclusion of all other breads. Many of them lay their personal loaves away as soon as the Cramer wagon comes so a clerk will not sell out every loaf before the grocer has had an opportunity to take his Butter Cream Bread home.

The salesmen's trousers and smocks are laundered by the bakery. The laundry bill for both plants amounts to over \$3000.00 annually.

CLEANED BY AIR
There are air lines throughout the plants. When the night's bake is completed this high pressure air is used to blow all accumulations of flour or crumbs out of the different machines and the floors are cleaned as immaculately as a home kitchen.

All bakers and bakeshop workers are supplied with clean aprons and towels at least daily and oftener if necessary.

The men's trousers and smocks are laundered by the bakery. The laundry bill for both plants amounts to over \$3000.00 annually.

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AUTO

PAINTING

Those Clean, Good Looking Butter Cream Trucks

Are Painted by

H. V. Lee Co.

1210 India at B Street

Established 1921

capable of grinding as much as 25,000 barrels of flour a day, milling processes still are exceedingly simple and the milling industry itself is hardly more than a step beyond the farmer's threshing machine.

New

MAYFLOWER DOUGHNUTS

MAYFLOWER Doughnuts are unlike any you ever tasted.... Unless, perhaps it was some you made yourself. They are made by the baker's of Cramer's Butter Cream Bread and Dolly Madison Cakes.

You have your choice of four kinds. Which is your favorite? Plain... sugar coated... mocha... or coconut. You'll find each kind, sealed in air-tight cellophane bags at your grocer's.

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MAYFLOWER DOUGHNUTS

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