

years as a result of the attention given the problem by the medical profession and law enforcement officers, it is believed that we may confidently look forward to the time, not many years distant, when the few remaining addicts will be persons taking opium because of an incurable disease, and addicts of the psychopathic, delinquent type who spend a good part of their lives in prison."

TIDAL MOTOR MADE BY BULGARIAN

A motor for the utilization of the power of the waves and tides has been designed and put to the test by a Bulgarian engineer, M. Vodenitcharoff, who has been experimenting for 10 years and has now produced a device sufficiently successful to enlist the support of the Bulgarian government, according to reports received at Vienna from Sofia.

The principle of the machine, the fifth which the inventor, has tried, is as follows: A stage, resting on piles is run from the shore into the sea. From this a "receiver" or float, weighing about 20 tons, is hung by a system of chains run over reels of special construction which put into motion a series of cog wheel. The receiver is fastened to the stage in such a way as to move easily in every direction according to the movement of the waves. Every movement of the surface of the water produces a corresponding movement of the receiver.

These irregular and chopping movements are transmitted by the chains and wheels into a regular movement in one and the same direction. Trials of the machine have, so reports say, been remarkably successful and have secured the support not only of the government of Bulgaria but the Chamber of Industry of the city of Burgas. Further experiments on a larger scale are to be made.

SIMPLE SCIENCE

By WOW

BREAD

The nicer our food the weaker our stomachs. The first bread was made out of acorns and beech-nuts, so the Ancients had to have strong stomachs to digest it

The early Egyptians went in for better flour with stronger flavor, so they used barley, wheat, etc., and kneaded the dough with their feet. Today all people need dough. That's because we can't get bread without it.

Wheat flour contains about seventy per cent. of starch, ten per cent of gluten, twenty per cent. of other things including water. The gluten contains nitrogen and is what makes the dough sticky and elastic. To make a high, well-piled loaf of bread the gluten must be plentiful and of good quality. That's why different flour produce different grades of bread, because the gluten varies in amount and especially in quality. European wheat is usually weak in gluten and American hard wheat strong in gluten.

In order to make the dough rise we usually use yeast. At hotels when

guests wish to rise without being called they eat self-raising flour for supper
It they wish to stay awake all night they eat pie and fruit cake.

Yeast is a vegetable and it resembles children since it's main object in life seems to be to eat sugar. In doing so it converts the sugar into alcohol and carbonic acid gas. In breadmaking the yeast feeds on the sugar in the flour, and the gas formed swells up the elastic dough. When baked the alcohol evaporates and some of the starch on the outside is converted into dextrin, which is pasty and causes the various constituents of the dough to stick together and form the crust.

Bakers used to be severely treated in olden times. When bread went to a high price it was the custom to hang the baker or two each time. When it was short weight they nailed the baker to his door-post by his ear. Fortunately for the baker this custom has become extinct. Another extinct custom was that of raining bread each morning for the Israelites in the wilderness.

BOBBED HAIR THREAT TO HAIRPIN INDUSTRY

A combined attack of bobbed-haired bandits and German manufacturers upon the hairpin industry of the United States has been successfully repelled by government scientists. The enemy is wavering and is expected soon to be in full retreat.

Some time ago the girls' desire for shortened tresses drove the hairpin manufacturers almost to despair. For of what use is a hairpin if one has no rebellious locks? Do men wear hairpins? The climax was capped, so the speak, when the manufacturers discovered that the remnant of hairpin users preferred a German variety of pin with a bluedfinish that American manufacturers did not know how to equal.

The U. S. Bureau of Standards was appealed to and the scientists there discovered that "blued" pins equal to the German could be made cheaply by treating ordinary pins to a certain degree of heat. The alien invasion has been checked, but no scientific remedy has yet availed against the bobbed-hair enemies of the hairpin industry.

PLOUGHING MADE EASIER BY ELECTRICAL DEVICE

An ingenious electrical method for making ploughing easier has been invented by E. M. Crowther and W. B. Haines of the Rothamsted Experimental Station, at Harpenden, England.

A large part of the work done in ploughing is "wasted" as friction between the mouldboard and the soil. The idea behind the present method is to use the soil moisture to lubricate the mouldboard.

By insulating the coulter of the plough and passing a current from it through the soil to the mouldboard the water in the film surrounding the soil particles is caused to move to the mouldboard, where it acts in the same way as water put on tools by men digging in sticky soil.