

THE WEST SHORE.

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RESULTS OF VIVISECTION.

INTERESTING EXPERIMENTS.

PROF. MOTT SHOWS HOW PEOPLE ARE TAKING POISON IN THEIR DAILY FOOD—A PROLIFIC SOURCE OF DYSPEPSIA SCIENTIFICALLY DEMONSTRATED.

A series of highly interesting experiments with dogs have been lately made by Prof. Mott; and in the *Scientific American* of Feb. 7th a detailed account is given. The disclosures are so unpleasant and startling—coming home, as they do, to every one—that we believe they should be given the greatest publicity. The effort Dr. Mott is making to purify our articles of kitchen use should receive the support of every thinking man and woman. There has been too much indifference on this subject—an indifference that has resulted in Americans earning the title of “a race of dyspeptics.” Poison, year after year, is introduced into the stomach with a criminal disregard to consequences that is appalling. If every purveyor of domestic supplies will carefully consider the result of Dr. Mott's experiments, as detailed in the *Scientific American*, one of the greatest, if not the greatest, of these evils will be corrected.

Dr. Mott says: “The introduction of alum in flour, for various purposes, has been a trick of the baker for the past 100 years. Fortunately for society, its introduction is limited now to a few unscrupulous bakers. In England, France and Germany it is an offense, punishable by fine and imprisonment, to use alum in any connection with articles of food. It should be so in America.”

The Royal Baking Powder Company of this city, a long-established corporation, celebrated for the absolute purity of their goods, some time ago commenced a vigorous warfare against many of their competitors who were indulging in hurtful adulteration. The contest excited great interest in scientific

circles, in which Prof. Angell, Dr. Mott and other leading lights took a very prominent part. The experiments of Dr. Mott are a result of this discussion, and go to prove conclusively that the most dangerous adulteration that a community has to guard against is alum in baking powder. In his paper the Doctor says: “It was with difficulty I found a suitable place to conduct the experiments, so that the animals would not disturb the neighborhood; but, through the courtesy of the Commissioners of the Dock Department, I secured a shed on their premises, foot of Sixteenth street and East river. This shed I had completely remodeled into a suitable house, having the dimensions of about 16x14x12 feet. Sixteen stalls were made inside, having the dimensions 3½x2x2½ feet. The bottom of each compartment was covered with straw; making a pleasant bed for the dogs. I then secured sixteen dogs from the Pound, which were all carefully examined to see if they were in a perfect state of health. None but the strong, healthy dogs were selected. The breed, age, food, color and weight of every dog was carefully noted. Each dog was then confined to a stall and securely chained, and they all received a number, from 1 to 16 I commenced my experiments on the 9th of September, and finished December 3d. My assistant was with the dogs from morning until night, and never left the animals without first securely bolting and locking the dog-house. No stranger was allowed to enter the house unaccompanied either by myself or my assistant, and the dogs never received a mouthful of food or anything else from any one except from my assistant or myself. I will now detail the result of my experiments:

“Dog No. 1.—Breed of dog, coach; age, 1 year; health, perfect; food, bread and crackers; color, spotted black and white; weight, 35 pounds; To this dog, on the morning of the 9th of September, were given eight biscuits, at 8:10 o'clock. The biscuits were made by myself, as follows: One quart sifted flour, 20 teaspoonfuls alum baking powder, 2 cupfuls water, 1 tablespoonful butter—

22 biscuits made, weighing 27 ounces; time of baking, 20 minutes.

“At 11:30, just three hours and twenty minutes, the dog was taken very sick, vomiting profusely; his vim and brightness of eye had departed, and he trembled considerably in his limbs.”

Experiments were then made upon three dogs, with biscuits containing only 10 teaspoonfuls of alum baking powder. The result indicated that some animals are more liable to yield to the effects of poisonous substances than others. When, on the other hand, three other dogs were fed with biscuits made with pure cream of tartar baking powder, no ill effects were experienced. They ate and ate with an evident relish, day after day, and even whined for more.

It was next necessary to discover what effect alum has on the solvent power of the gastric juice. In order to obtain some pure gastric juice, a curious device was resorted to. Dr. Mott sent several dogs to Professor Arnold, Medical Department of the University of New York, who inserted a small metallic tube directly through the skin and into the stomach of each one of them, when the dogs were in a perfectly healthy condition. Prof. Arnold sent to Dr. Mott some gastric juice, which was produced by tickling the lining of the stomach of the dogs with a feather or glass rod, which caused the gastric juice to flow out of the tube into a receptacle placed underneath the dog to receive it.

Dr. Mott, aided by Prof. Schedler, then began some experiments with the four samples of gastric juice which he had received from Prof. Arnold, to discover the effect of the gastric juice in which alum had been dissolved upon fibrine, a white, very easily digested substance, having a basis of coagulated blood. The fibrine was imperfectly digested, and the experiments were very important, as showing that alum can check the digestion of so easily digested a substance as fibrine. They indicate, therefore, how dangerous it is to introduce these two salts into our stomachs, if we do not wish to excite indigestion and dyspepsia. Further ex-