

RESULTS OF VIVISECTION.

INTERESTING EXPERIMENTS.

Prof. Mott shows how People are taking poison in their daily food—A prolific source of Dyspepsia Scientifically Demonstrated.

From the New York Tribune.

A series of highly interesting experiments with dogs has been lately made by Prof. Mott, and in the *Scientific American* of Feb. 7, 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 had 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 of 3½x2½ feet. The bottom of each compartment was covered with straw, making a pleasant bed for the dogs. I then secured 16 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 3. 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, was given eight biscuits at 8.10 o'clock. The biscuits were made by myself as follows: One quart sifted flour, 20 teaspoons alum baking powder, 2 cups water, 1 tablespoon 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 teaspoons of alum baking powder. The result indicated that some animals are more liable

to yield to the effects of poisonous substances than others are. 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 Prof. 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 experiments showed that the digestive power of the gastric juice is entirely destroyed by alum, so far as its power of dissolving the more indigestible substances, like the boiled white of an egg, is concerned.

Dr. Mott then determined to learn whether alumina could be found in the various organs of the body if a dog was fed with hydrate of alumina. He found a considerable quantity of the stuff in the blood, liver, kidneys and heart.

The Doctor goes on to describe the different symptoms exhibited by these dogs as they passed through almost every phase of animal agony until they were left in a complete state of physical prostration. To those especially interested in the details of this subject, the article in the *Scientific American* supplement will give most complete information, and we will spare the sympathetic reader the account of the sufferings of these dumb brutes.

Dr. Mott's conclusions, after making these experiments, are of vital interest to every one who either makes or eats bread, and therefore concern all.

"These experiments," said he recently, while speaking before the American Chemical Society, "clearly demonstrate that the salts left in the biscuit when a cream of tartar baking powder is used are perfectly harmless, but when an alum baking powder is used are very dangerous, for in every case where dogs were fed on biscuits made with such powders, the dogs were made very sick, causing them to vomit profusely, lose all energy, and show weakness in their limbs."

It is a clear and triumphant corroboration of the assertions of the Royal Baking Powder Company, and entitles them to the gratitude and support of the community they are endeavoring to protect. As they claim, and Dr. Mott has shown, bread made of alum is totally unfit for human or animal food. 'Tis true, in the bread of domestic consumption there may not be as large a proportion of baking powders as was in the bread used by Dr. Mott, and that accounts for the fact that the symptoms in the reader are not so well defined as they were in the experiments in question. How many there are of our immediate friends suffering from this evil, scientific investigation will alone reveal; but many a lingering and suffering invalid, with no defined idea of his trouble, can easily trace it to its source by stopping the use of alum powders, substituting some brand like the Royal Baking Powder, whose manufacturers have a competent chemist in their exclusive employ, who rigidly analyzes every ingredient before its incorporation into their powder. The old cry of "honesty being the best policy" may be worn threadbare, but its truth will hold forever, and while adulterations and short weights abound, it is a pleasure to see at least one in the trade strenuously endeavoring to give full weights and pure goods,

INVALIDS AND OTHERS SEEKING HEALTH, STRENGTH AND ENERGY,

WITHOUT THE USE OF DRUGS, ARE REQUESTED TO SEND FOR THE ELECTRIC REVIEW, AN ILLUSTRATED JOURNAL, WHICH IS PUBLISHED FOR FREE DISTRIBUTION.

IT TREATS UPON HEALTH, HYGIENE, and Physical Culture, and is a complete encyclopedia of information for invalids and those who suffer from Nervous, Exhausting and Painful Diseases. Every subject that bears upon health and human happiness, receives attention in its pages; and the many questions asked by suffering invalids, who have despaired of a cure, are answered, and valuable information is volunteered to all who are in need of medical advice.

The subject of Electric Belts versus Medicine, and the hundred and one questions of importance to suffering humanity, are duly considered and explained.

The ELECTRIC REVIEW exposes the unmitigated frauds practiced by quacks and medical impostors who profess to "practice medicine," and points out the only safe, simple, and effective road to Health, Vigor, and Bodily Energy.

Send your address on postal card for a copy, and information worth thousands will be sent you. Address, the publishers.

PULVERMACHEN GALVANIC CO., 513 Montgomery St., San Francisco, California.

Coughs, Bronchitis & Consumption.

What a Well-known Druggist says about Allen's Lung Balm.

MOTHERS, READ! OAKLAND, STATION, KY.

Gentlemen: The demand for Allen's Lung Balm is increasing constantly. The ladies think there is no medicine equal to it for Croup and Whooping Cough.

C. S. MARTIN, Druggists.

Sold by all Medicine Dealers.

TOLL-GATE NO. 2. Beautiful Colored Picture. Very ingenious. 75 objects to find. Send stamp for package. DR. E. C. ABBEY, Buffalo, New York. dw ly

Catarrhal POISON

Wei De Meyer's Treatise on Catarrh, explains the following important facts:

1. That Catarrhal Colds become a poisonous infection, at first local, and finally constitutional.
2. That, being Constitutional, the infection is beyond the reach of mere local remedies.
3. That impurities in the nostrils, are necessarily swallowed into the stomach and inhaled into the lungs, thus poisoning the Digestive, Respiratory and Genito-urinary organs.
4. That Catarrhal virus follows the mucous membrane and causes Deafness, Dyspepsia, Chronic Diarrhea, Bronchitis, Leucorrhoea, and Consumption.
5. That Smokes, Douches, Inhalations, and Insoluble Snuffs, cannot possibly remove infectious inflammation from the organs named.
6. That an antidote for Catarrh must possess an inoculative affinity for, and the quality of being absorbed by, the purulent mucous wherever located.

Based upon these plain theories Dr. Wei De Meyer's Catarrh Cure has proved to be infallible. It not only cures, it cures Catarrh at any stage. Home testimony.

Cured! Cured! Cured! Cured!

- W. D. WOODS, 487 Broadway, N. Y., Cured of Chronic Catarrh.
- F. J. HASTETT, 859 Broadway, N. Y., 4 years Catarrh.
- G. L. BRUSH, 443 Broadway, N. Y., 10 years Catarrh.
- S. BENEDICT, Jr., Jeweler, 697 Broadway, N. Y., (lady friend), cured of Chronic Hay Fever.
- MRS. EMMA C. HOWES, 39 W. Washington Square, N. Y., cured of 30 years Chronic Catarrh.
- REV. GEO. A. REIS, 169 Jay St., Brooklyn "It restored me to my ministerial labors."
- REV. CHAS. J. JONES, New Brighton, S. I. "Worth ten times the cost."
- REV. ALEX. FREES, Cairo, N. Y. "It has worked wonders in six cases in my parish."
- L. F. NEWMAN, 305 Fulton St., Brooklyn, cured of 4 years Chronic Catarrh.
- MRS. J. SWARTZ, Jr., 230 Warren St., Jersey City, cured of 13 years Chronic Catarrh.

A real cure for this terrible malady, is the most important discovery for the relief of human suffering, since vaccination. Wei De Meyer's Catarrh Cure is sold by all druggists, or delivered by J. B. Dewey & Co., 46 Dey St., N. Y., for \$1.50 a package. To Clubs, six packages for \$7.50. Dr. Wei De Meyer's Treatise, with full explanations and overwhelming proofs, is Post-paid and sent free to anybody.

W. L. PICKARD PAYS CASH FOR WOOL.

WE HAVE 1871 SINCE CARRIED THE LARGEST AND MOST COMPLETE STOCK OF HARNESS, SADDLES, COLLARS, SADDLERY HARDWARE IN UTAH.

100 Sets of Team Harness, 100 Sets of Buggy Harness, AND A LARGE ASSORTMENT OF SADDLES.

Our Spring Stock of Goods for 1880 is Very Complete, and Comprises in part

WE SOLICIT AND PROTECT WHOLESAL TRADE.

WALLIN & PICKARD, SALT LAKE CITY, UTAH.

LOCK BOX 276.

W. L. PICKARD BROS. BELTS AND FURS.

KIRK'S Standard SOAPS!

—FOR— ABSOLUTE PURITY, REAL WORTH AND GENUINE WASHING QUALITIES.

RECOGNIZED IN ALL MARKETS of this COUNTRY —AS THE— STANDARD OF EXCELLENCE

NICHOLS, SHEPARD & CO., Battle Creek, Mich.

Established ORIGINAL AND ONLY GENUINE IN 1843.

WINDMILL Threshing Machinery and Portable and Traction Engines.

THE STANDARD of excellence throughout the Grain-Raising World. For Grain-Saving, Time-Saving, Perfect Cleaning, and all other kinds of work, it is the only machine that can be relied upon. It is the only machine that can be relied upon for the most perfect and efficient work in all kinds of grain-raising. It is the only machine that can be relied upon for the most perfect and efficient work in all kinds of grain-raising.

ASTONISHINGLY DURABLE and perfect in every detail. For sale by all druggists, or delivered by J. B. Dewey & Co., 46 Dey St., N. Y., for \$1.50 a package. To Clubs, six packages for \$7.50. Dr. Wei De Meyer's Treatise, with full explanations and overwhelming proofs, is Post-paid and sent free to anybody.

BE NOT DECEIVED by cheap experimental and worthless machines. At all, get the "ORIGINAL" and the "GENUINE" from the Nichols, Shepard & Co., Battle Creek, Mich.