

CURIOUS AND SCIENTIFIC.

BAD WATER.—An editorial in the *Boston Journal of Chemistry* about "Boston water," attributes its unpleasant "fishy, cucumber taste and smell" to a diseased condition of fish which become coated with a slimy membrane when the water supply becomes diminished by drought, this slime sloughing off when a fresh supply of water is afforded them. A mere flake of this slime will contaminate a barrel of water.

A Russian has taken out a patent for solidifying petroleum into a substance like wax. In this form, it is claimed, all the danger and difficulty attending transportation is avoided.

WHAT MAKES CORN POP?—Chemists who have examined Indian corn, find that it contains all the way from 6 to 11 parts in a hundred (by weight) of fat. By proper means this fat can be separated from the grain, and it is then a thick pale oil. When oils are heated sufficiently in closed vessels, so that the air can not get to them, they are turned into gas, which occupies many times the bulk that the oil did. When pop-corn is gradually heated and made so hot that the oil inside of the kernels turns to gas, this gas can not escape through the hull of the kernels, but when the interior pressure gets strong enough, it bursts the grain, and the explosion is so violent that it scatters it in the most curious manner. The starch in the grain becomes cooked and takes up a great deal more space than it did before.—*Agriculturist*.

"DOMESTIC ECONOMY."—Miss Sedgwick has asserted that "the more intelligent a woman becomes, other things being equal, the more judiciously she will manage her domestic concerns." And we add that the more knowledge a woman possesses of the great principles of morals, philosophy and human happiness, the more importance she will attach to her station and to the name of a "good housekeeper." It is only those who have been superficially educated, or instructed in showy accomplishments, who despise the ordinary duties of life as beneath their notice. Such persons have not sufficient clearness of reason to see that "domestic economy" includes everything which is calculated to make people love home and be happy there.

AS MAD AS A HATTER.—The most striking (in two senses) thing in the hatter's art, in the old time when felt hats were made by hand, was the beating up of the felt. Dipping the mass of wool and hair from which his fabric was to be formed, frequently into hot water, the hatter was then wont to fly at it, as if in a passion, and give it a violent beating with two sticks, one held in each hand till it was matted together into the felt, which in time, after numerous combings and dressings and dressings and shearings, became the stylish beaver worn by the men of fifty years ago. The hatter seemed to be very mad at this object of his labor, and "mad as a hatter" needed no explanation in those days.

Bullet Holes in Windows.

Dr. Balch, in his review of the medical evidence given on the second trial of Jesse Billings, Jr., says that a ball fired from a rifle through a window pane will make a hole one-third smaller than the ball itself. He has proved this by repeated experiments. He dwells on this at some length; but after all it was a fact that was fully known and discussed as long ago as the time when Jesse Strang shot Mr. Whipple through a window in the old house at Cherry Hill.—*Albany Evening Times*.

The Human Figure.

The height of the human figure is six times the length of the foot. Whether the form is slender or plump, the rule holds good; any deviation from it is a departure from the highest beauty in proportion. The Greeks made all their statues according to this rule. The face, from the highest part of the forehead, where the hair begins, to the chin, is one-tenth of the whole stature. The hand, from the wrist to the end of the middle finger, is the same. From the top of the chest to the highest point of the forehead is the seventh. If the face, from the roots of the hair, be divided in three equal parts, the first division determines the place where the eyebrows meet, and the second the nostrils. The height from the feet to the top of the head is the distance between the extremities of the fingers when the arms are extended,

The Science of Childhood.

It is not enough to study the science of childhood in theory. It has its most practical applications. Children are like flowers, and as every one likes flowers, so every one likes children. But it is one thing to love flowers in a general way and another thing to love them with the instructed and yet tender love of the gardener, who knows all that is harmful, all that is helpful, to his plants, and what will foster their growth and what will hinder it. So should mothers love their children. In the first three years a child should be almost exclusively in the care of its mother. From the third to the sixth—the kindergarten age—the child should be mainly in charge of its mother. Mothers are the best kindergartners, and a knowledge of the kindergarten system should be included as a part of every young girl's education. And even later on the intellectual sympathy between the mother and her children should not be broken, and noble mothers are those who go on studying with their sons and daughters, to be their helpers in this as in all things. And so we appeal to women to educate themselves, for their own sakes, for the sake of society, which they will thus refine and educate, and for the sake of their children, whose educators they, the mothers, are to be. But how can they truly educate these unless they themselves are truly educated.—*Prof. Adler*.

Unconscious Effort.

The March number of the *Young Scientist* contains an interesting article on Unconscious Effort, in which the following letter from Sir David Brewster to Sir Walter Scott is given:

"One of the most remarkable and inexplicable experiments relative to the strength of the human frame is that in which a heavy man is raised with the greatest facility, when he is lifted up the instant that his own lungs and those of the persons who raise him are inflated with air. This experiment was, I believe, first shown in England a few years ago by Major H., who saw it performed in a large party at Venice under the direction of an officer of the American navy. As Major H. performed it more than once in my presence, I shall describe as nearly as possible the method which he prescribed. The heaviest person in the party lies down upon two chairs, his legs being supported by the one and his back by the other. Four persons, one at each leg, and one at each shoulder, then try to raise him, and they find his dead weight to be very great, from the difficulty they experience in supporting him. When he is replaced in the chair, each of the four persons takes hold of the body as before, and the person to be lifted gives two signals by clapping his hands. At the first signal he himself and the four lifters begin to draw a long and full breath, and when the inhalation is completed, or the lungs filled, the second signal is given, for raising the person from the chair. To his own surprise and that of his bearers, he rises with the greatest facility, as if he were no heavier than a feather. On several occasions I have observed that when one of the bearers performs his part ill, by making the inhalation out of time, the part of the body which he tries to raise is left, as it were, behind. As you have repeatedly seen this experiment, and have performed the part both of the load and of the bearer, you can testify how remarkable the effects appear to all parties, and how complete is the conviction, either that the load has been lightened, or the bearers strengthened by the prescribed process. At Venice the experiment was performed in a much more imposing manner. The heaviest man in the party was raised and sustained upon the points of the forefingers of six persons. Major H. declared that the experiment would not succeed if the person lifted were placed upon a board, and the strength of the individuals applied to the board. He conceived it necessary that the bearers should communicate directly with the body to be raised. I have not had an opportunity of making any experiments relative to these curious facts; but whether the general effect is an illusion, or the result of known or of new principles, the subject merits a careful investigation."

Unpleasant odor from the arm-pits can be removed by washing well with a teaspoonful of ammonia in a bowl of water.