

EDITORIAL SUMMARY.

Adulteration of Food and Drugs.—A bill is now before the British Parliament "To amend the Adulteration of Articles of Food or Drink Act, 1860, and to extend its provisions to Drugs." The former Act was, from various causes, found to be ineffectual, and the present measure, introduced by Mr. Dixon, is supposed to put matters in a practicable shape.

The first clause declares that any person who shall admix, or cause to be admixed, with any article of food or drink, any injurious or poisonous ingredient to adulterate the same for sale, or any person who shall mix, or cause to be mixed with any drug, any material to adulterate it for sale shall, for the first offence, pay a penalty of *fifty pounds sterling*, with costs, and if convicted a second time shall be deemed guilty of a misdemeanor and be imprisoned for six calendar months, with hard labor.

The second clause imposes a penalty of twenty pounds, on any person who shall sell any adulterated article of food, or drug, whether he knows it to be such or not; a repetition of the offence is punishable by the publication of the offender's name in a newspaper, or any such method as the justices may deem desirable. Public analysts are to be appointed, to which suspected articles may be submitted by inspectors of markets, nuisances, &c., whose business it shall be to find out adulterated substances. Purchasers of adulterated articles can also submit them for analysis on payment of a fee not exceeding five shillings, and the certificate of the analyst shall be deemed sufficient evidence for conviction.

The above are the principal features of the Act, which is certainly sufficiently stringent for all purposes, and if enforced will be of great service to the community.

Trichina Spiralis.—A most interesting lecture on trichinosis was delivered recently by Prof. J. C. Dalton, at the College of Physicians and Surgeons, New York, and is published in the *Boston Medical and Surgical Journal*. The Dr. states, that by investigations made in Chicago, it was found that one pig in every fifty was infected by disease, and that the Germans in that city furnished most, if not all, the cases of trichinosis which had occurred. This is to be accounted for by their eating badly cooked sausages and underdone ham. A temperature at least 160° F. is necessary to destroy the worm. The Dr. accounts for the perpetuation of the species by the following hypothesis:—

Suppose we start with the pig infected with quiescent and sexless trichina. This pig is butchered. You know that butchering

establishments are the abundant resort of rats, which feed on the refuse scraps of meat, and of course these after a time become infected with trichina. The worms are developed in the intestine of the rat, and produce living young. These not only infect the muscular system of the rat, but they are also discharged with the feces. These feces become mingled with the blood of the pig—an animal, as we know, not very fastidious with regard to his food, and consequently subject to several parasitic diseases—and thus the round of development of the trichina is completed. Again, its perpetuation is provided for by a similar round between the cat and the mouse. The mouse becomes infected by feeding upon refuse meat, and the cat by devouring the mouse or rat. We have, therefore, the natural history of the animal, embracing in each case two different phases, in one of which it undergoes an active development, in the interior of the intestine, while in the other it assumes the quiescent form, becoming encysted in the substance of the muscular system.

Weights and Measures.—The introduction of the metrical system of weights and measures into pharmacy is exciting considerable attention in England. The subject was brought before the Pharmaceutical Society at their last meeting, by Dr. Redwood, and considerable discussion ensued, which will be continued at the next meeting, as members thought it desirable that the question should be thoroughly ventilated, and a means devised to render the adoption of the metrical system imperative. Mr. Haselden remarked, that for the future it was intended to examine young gentlemen who intended to pass the Pharmaceutical Board, in this system, and that after Oct 1st, he believed the examination would be enforced. The sooner, therefore, students become acquainted with the subject the better. France, Belgium, Holland, Italy, Spain, Portugal, Greece, and part of Germany, have now adopted the system in full, and we hope this attempt to introduce it in England may prove successful, and that Canada may not show herself behind the times. Prof. Redwood's remarks will be found in another column.

New Law regarding Dispensing in New York.—A bill has been introduced, and is now awaiting the governor's signature, regulating the dispensing of physician's prescriptions, in New York. The act declares it unlawful for any person to prepare a medical prescription unless he has served two years apprenticeship in a drug store, or is a graduate of a medical college or college of pharmacy. The employer, or person in charge as proprietor, is also held amenable for permitting an unqualified person to dispense. The penalty is a fine, not exceeding \$100; or six months imprisonment in the county jail. In case of death arising from violation of the act, the person offending is to be deemed

guilty of a felony, and is punishable by a fine of not less than \$1,000, nor more than \$5,000; or by a term of imprisonment of not less than two, or more than four years; or by both fine and imprisonment, if the court so direct. The act is to take effect immediately.

A New Element.—Spectrum analysis has again proved the means of discovering a fresh addition to the rapidly increasing list of elementary substances. H. J. Sorby, F.R.S., while examining a specimen of jargon, noticed certain bands which he could not attribute to the presence of zirconium, or any other known element, and which he therefore held to denote a new substance. At a recent meeting of the Royal Society, he exhibited these bands, by means of a spectrum microscope, and formally announced the discovery of a new metal, for which he proposes the name *jargonium*. It is, however, questionable whether the same appearances which led Mr. Sorby to this conclusion, were not observed previously by Prof. Church, who attributed the phenomena to the presence of Svanberg's norium. The *Chemical News*, for May, contains a letter from Prof. Church to this effect. At all events, Mr. Sorby was ignorant of Prof. Church's investigations, which were, however, published in the May number of the *Student*, 1866. The *Chemical News* thinks it probable that further researches may show that Svanberg's noria, Church's nigria, and Sorby's jargonia, are each separate entities.

Composition of Road Dust.—Mr. Dancer, F.R.A.S., has been making microscopic examinations of dust, and has embodied his observations in a paper read before the Manchester Philosophical Society at their last meeting. A liberal allowance of animal life was found to be present in ordinary road dust, the largest amount being about five feet above the surface of the earth. The main portion at this point was composed of vegetable matter which had passed through the stomachs of animals, or suffered decomposition in other ways. This is a very pleasing reflection, when we consider that five feet from the surface is about the height of a man's mouth. The investigations of Mr. Dancer may go far to show how the germs of disease may be inhaled into the system through the medium of the air, and will doubtless prove useful in a sanitary point of view.

New Lucifer Match.—Dr. Fleck, of Dresden, has invented a non-poisonous match, in which sodium, in a fine state of division, is made to take the place of phosphorus. A mixture of sodium, nitrate of potash and sulphide of antimony is made into a paste, with a solution of cacutheou, and small pellets