pure strychnia present. Ferri-cyanide of potassium (red prussiate of potash), per-oxide of lead and per-oxide of manganese will give, the same colors when they are added to the strychnia in sulphuric acid. If per-oxide of lead is employed, a fraction of a drop of nitric acid should be added. All these tests showed the crystals obtained from this stomach to be strychnia, as did the other characteristic chemical compounds of it. There still remained a very important experiment to make, to place beyond question the nature of this poison, and that was by the actual trial of it on a living animal. Having but little of it to operate with, I selected a Canary bird for the experiment, and after dissolving one twentieth of a grain of the crystals in alcohol and water and evaporating off the alcohol, leaving an aqueous solution of strychnia, Dr. Ainsworth having made an opening in the skin of the bird, which was held by Mr. Balch, by means of a pipette I threw a drop of this solution under the skin of the bird. In a few moments it had convulsions, and died with the characteristic symptoms of strychnia-poisoning in less than one minute, the legs being thrown stiffly back in a line with the body, and the neck bent back by the spasm.

The whole amount of strychnia which I separated from the substance of the stomach in this case was less than one tenth of a grain, but it was well defined and clear from all admixtures. I found it much less difficult to extract the strychnia from the substance of the stomach than from the grumous mass of half-digested matter which it had contained, and I recommend this method to my brother chemists as reliable and not difficult to execute.—Boston Med. and Surg. Journal.

MEDICINE.

ON THE DETECTION OF SUGAR IN URINE.

By MR. ATTFIELD, (London Pharmaceutical Journal, January 1, 1861.)

On the same. By DE. BENCE JONES. (London Pharmaceutical Journal, February 1, 1861.) New Test for Diabetes. By DE. E. C. BIDWELL. (Boston Medical and Surgical Journal Nov. 22, 1860, and New Orleans Med. News and Hosp. Gazette, Jan., 1861.)

1. The London Pharmaceutical Journal for January notices a communication from Mr. Attfield, which has also appeared in the Chemical News, having reference to Boettger's test for sugar in urine. It will be remembered that his test consists in adding a few grains of ordinary trisnitrate of bismuth to a portion of the urine, then pouring in an equal volume of a strong solution of carbonate of soda, and heating the mixture. The presence of sugar is indicated by the formation of a deep brown or black color, due to a reduction of the oxide of bismuth. Boettger originally devised this process to obviate some of the sources of error which frequently attend the application of Trommer's test. It is well known that the presence of certain constituents of the urine, and especially of uric acid in abnormal quantity, may cause a reduction of the oxide of copper in the application of Trommer's test, without sugar being really present. Oxide of bismuth was found to be certainly not affected by uric acid, and to that extent therefore might be considered as preferable to oxide of copper. Mr. Attfield has been engaged in some experiments on the applicability of Boettger's test. He states that it is far more delicate than Trommer's test. He finds that by it abundant indications of the presence of sugar can be obtained in an aqueous solution so dilute as to give no reaction with Trommer's test. But he also finds that the presence of albumen in the urine will cause a reduction of the oxide of bismuth, and introduces therefore a source of error. He states that the action of albumen is far less energetic and complete than that of sugar, but that nevertheless blackening does occur, and to a greater extent than could be accounted for by the influence of the sulphnr present in the albumen. Moreover, some of the constituents