THE AMERICAN CHEMICAL SOCIETY.

I.—Proceedings.

Regular Meeting, January 2nd, 1879.

The meeting was called to order at 8 o'clock, by Mr. Nichols, in the absence of the President and Vice-Presidents. Dr. Alsberg was elected Chairman. The minutes of the last meeting were read and adopted.

The resignation of Prof. Barker was read and accepted.

Messrs. H. M. McIntyre and G. W. Wigner were elected Members.

Messrs. F. W. Potter, Chas. de Lamothe, Chas. Marchand and Herbert Hazard were proposed as Members, and Messrs. C. F. Wingate and E. W. Leggett as Associates.

The Corresponding Secretary reported that the following circular has been sent to the proposed list of exchanges.

American Chemical Society,
No. 11 East 14th St.

New York, January 1, 1879.

The American Chemical Society, which was founded in April, 1876, has now completed the Second Volume of its Proceedings. The First Volume contains the papers read before this Society in 1876 and 1877, and the Second Volume those of 1878.

The papers read before this Society in 1879 will form Volume Three, which we propose to send to you as fast as the numbers appear, in exchange for the of the same year.

Please let me know if this proposal is agreeable to you.

In addition to our proceedings for 1879, we have the publications for 1876, 1877 and 1878, which we can exchange for the issued in those years, if you desire this exchange.

With much respect, I remain

Your obedient servant,

P. CASAMAJOR,

Corresponding Secretary.

Dr. Ricketts read the paper of the evening, entitled "A Method for the detection of artificial or dextro-glucose in cane sugar, and the exact determination of cane sugar by the polariscope."

In the discussion which ensued, Dr. Behr wished to know if Dr.

Ricketts had made any experiments in regard to the inverted sugar naturally present in raw and refined sugars. This inverted sugar, in most cases optically inactive at ordinary temperature, might have some action on light at 92° C. and would probably deviate the plane of polarization to the right. He also called attention to the fact that in certain raw sugars, as well as in different products of the refinery which contain naturally inverted sugar, the inverted sugar acts on polarized light in the same direction as cane and grape sugar. Such sugars, if tested after inversion in accordance with Dr. Ricketts' method, would not show zero, but more or less deviation to the right.

Mr. Ricketts said that in his experience the action by inverted sugar was zero at 92° C.

Mr. Casamajor called attention to the fact that beyond inverted sugar and aconitic acid none of the impurities of cane sugar are known. Beet sugars have been better studied. In them have been found asparagine, asparaginic and citric acids, dextrane, etc. Very likely, substances, the representatives of all these, as aconitic acid is the representative of citric acid, exist in cane sugars, and to them the irregularities are due.

Mr. Eastwick stated that he had also found a difference between the direct and inversion methods of testing in the lower products of the refinery, amounting sometimes to as much as two or three per cent.

The meeting then adjourned.

S. A. GOLDSCHMIDT.
Recording Secretary.

II.—A Method for the Detection of Artificial or Dextro-Glucose in Cane Sugar, and the Exact Determination of Cane Sugar by the Polariscope.

By P. DE P. RICKETTS, Ph. D.

Received February 25, 1879.

Having been called upon during the past Summer to examine a number of sugars for artificial or dextro-glucose, I found it necessary to determine some quick and accurate method for the detection of this substance, in the presence of invert and cane sugar. This, I find, can be readily accomplished, by taking advantage of the following facts :