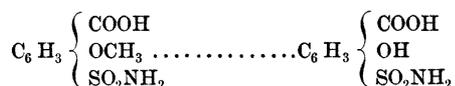


acid was formed. A number of the salts of the acid were prepared.

On the Action of Potassium Hydroxide on Orthomethoxysulphamine-benzoic Acid: By CHAS. WALKER. When the sulphonic acid described in the last paper was converted into an amide and fused with potassium hydroxide the product was not, as was expected, the corresponding dihydroxy-benzoic acid; but, as the author has shown, orthoxysulphaminebenzoic acid. The change can be represented thus:



Several salts of the acid were also made and studied.

A Simple and Efficient Boiling-Point Apparatus for Use with Low- and with High-Boiling Solvents: By H. C. JONES. The author has modified the apparatus devised by Hite by making it longer and replacing the inner tube by a platinum cylinder. By these changes he claims to have avoided the errors caused by the cold liquid returned by the condenser coming in contact with the thermometer, and also those due to radiation of heat from the bulb of the thermometer. He also replaces the outer vapor jacket, so generally used, by a cylinder of asbestos. A number of results are given which were obtained with both high and low boiling solvents.

Aluminum Alcoholates: By H. W. HILLYER. As was stated in a paper published some time ago, the authors found that when an anhydrous chloride was added to aluminum in alcohol a rapid deposition of the metal and an evolution of hydrogen took place. Dry hydrochloric acid gas or a solution in alcohol will cause a rapid evolution of gas when added to the aluminum in alcohol, and if the action is once started it will continue for some time even if no more acid is added. When the solution cools a crystalline compound, probably an addition product of the chloride and alcohol, separates out. When stannic chloride and hydrochloric acid gas are used it is very important that the materials should be completely dehydrated, as the presence of a small amount of water will stop the reaction. The results seem to show

that it is necessary, in order to get a satisfactory action of aluminum on alcohol, that it should be anhydrous; that it should contain an anhydrous chloride with which it can form an addition-product; and, that the aluminum should be coupled with a more easily reducible metal.

Behavior of Chloral Hydrate with Ammonium Sulphide: By J. LESINSKY and C. GUNDLICH. The authors found that a mixture of chloral hydrate and ammonium sulphide will, after a longer or shorter time, depending upon the temperature, form a dark precipitate. They suggest it as a possible test for the purity of chloral hydrate and propose to study the reaction and the product.

A New and Rapid Method for the Quantitative Separation of Iron, Aluminium, Chromium, Manganese, Zinc, Nickel and Cobalt: By A. R. CUSHMAN. This method, which is more rapid than those generally used, has been found very satisfactory; but no details can be given in a review, as it is already in the most condensed form possible. The following reviews are also given: A Resumé of Progress in the Chemistry of the Carbohydrates during 1896; *Traité élémentaire de mécanique chimique fondu sur la thermodynamique*, P. Duhem; *Elektro-Chemische Übungsaufgaben*, F. Oettel; *Theorie und Praxis der Analytischen Electrolyse der Metalle*, B. Neumann; *Le four électrique*, H. Moissan.

J. ELLIOTT GILPIN.

NEW BOOKS.

La structure du protoplasma et les théories sur l'hérédité et les grands problèmes de la biologie générale. YVES DELAGE. Paris, C. Reinwald et Cie. 1895. Pp. xvi + 878. 24 fr.

Geological Survey of Canada. Annual Report, Vol. VIII., 1895. GEORGE M. DAWSON. Ottawa, S. E. Dawson. 1897.

A Popular Treatise on the Physiology of Plants. PAUL SORAUER. Translated by F. E. WEISS. London and New York, Longmans, Green & Co. 1895. Pp. x + 256.

Water and Public Health. JAMES H. FUERTES. New York, John Wiley & Sons; London, Chapman & Hull, Ltd. 1897. Pp. v + 75.