

## Glycerin Analysis Report

The following report of the Glycerin Analysis Committee of The American Oil Chemists' Society was presented at the Fourth Annual Fall Meeting at Chicago, November 13.

THE report of the Soap Section at New Orleans last May directed attention to the fact that the accepted analysis of the A.O.C.S. Standard Crude Glycerin accounts for only about 98.5% with 1.5% unaccounted for. The analyses used to make up this total were those for true glycerol content by the acetin method, organic residue, ash and moisture. This discrepancy was confirmed in the laboratory of Mr. A. K. Church by an analysis on a sample of Standard C. P. Glycerin certified to by the British Executive Committee in which the acetin result was about 1.5% lower than the apparent glycerin content by the specific gravity or bichromate method. In view of the excellent agreement between cooperative analyses by the acetin method, these discrepancies are very disturbing.

While the problem is chiefly of an academic nature, a letter of inquiry sent out by your chairman evoked a surprisingly large number of replies indicating not only a keen interest but a willingness to work. It was felt that any further cooperative work should take the form of analyses by the bichromate, acetin and specific gravity methods on several commercial distilled glycerins of C.P. or U.S.P. grade and, if possible, on a few highly purified glycerols. A number of laboratories have volunteered to determine moisture on these cooperative samples but, as was expected, few care to undertake the task of preparing a highly purified glycerol. One such attempt has been made, however, and a set of four samples is ready for distribution to fourteen laboratories which have agreed to work along the lines outlined above. We are also in correspondence with the British Executive Committee, from whom we hope to obtain sufficient Standard C. P. Glycerin for our use as a cooperative sample to be distributed later. The committee will be very grateful for any suggestions or advice which will aid in the solution of the problem before us.

J. T. R. ANDREWS, *Chairman.*

The stockholders of the Will & Baumer Candle Company, Syracuse, have voted approval to an increase in the company's authorized common stock 150,000 shares from 100,000 shares. It was stated that it has no intention to issue the additional shares now.

## New Books

HYDROGENATION OF ORGANIC SUBSTANCES:  
By Carleton Ellis, 8vo, 1014 pp. New York, D. Van Nostrand Co., Inc., \$15.00.

CARLETON ELLIS, whose previous work on the hydrogenation of oils has been for many years the standard reference book on the subject, has now completed the preparation of this new and enlarged edition which carries the subject into the fields of general organic chemicals and fuels, including coal and petroleum oils, while at the same time recording all the advances in the hydrogenation of fatty oils since the publication of the original volume. The method of treating the subject is all-inclusive, every process and type of equipment, as well as every patent and every published investigation being recorded.

The study of the subject of hydrogenation is developed in the text in a logical, progressive manner. Preliminary consideration is given to the theory and mechanism of catalysis, catalytic poisons, and the many varieties of catalysts, metallic and non-metallic, that have been proposed. The general applications of hydrogenation in organic chemistry, with particular reference to hydrogenation of carbocyclic compounds, are next considered. Nuclear hydrogenations and those at nitrogen linkages are discussed fully, followed by a thorough and complete discussion of the hydrogenation of fatty oils, including a resumé of the developed uses for hydrogenated oils and fats, edible and technical.

The reader is led progressively through the hydrogenation of naphthalene, anthracene, phenanthrene and their derivatives to the hydrogenation of coals and related hydrocarbons and that of mineral oils. The reduction of carbon monoxide by hydrogenation methods and the synthesis of methanol are carefully reported and the final chapters of the book describe the various practical methods for the generation of hydrogen.

This is truly a monumental work, and all chemists who have any interest whatever in organic synthesis or in fatty oils, or in fuels of any kind, will want to include it in their libraries.

All producers and manufacturers of oils, soaps and allied products will also find Ellis' volume of incalculable value.