most clearly and lucidly set forth. As the translator says in his preface, "The examples given are not only simple, but they are also types of definite processes." Starting with suggestions as to current sources and general apparatus, there follow chapters on the testing and calibration of measuring apparatus, the influence of current density, concentration, temperature, etc., upon the fall of bath-pressure in the electrolyte, influence of current density and concentration on the course of reactions, application of gas analysis to electrochemical reactions, experiments with a diaphragm, metal precipitations with soluble and insoluble anodes, experiments with molten electrolytes, and with multipolar electrodes. The last chapter on organic electrolysis is by Prof. Dr. K. Elbs. The book should be used by all teachers and students in this field and Dr. Smith is to be thanked for giving us this excellent translation.

W. WALLEY DAVIS, JR.

LABORATORY EXPERIMENTS ON THE CLASS REACTIONS AND IDENTIFICATION OF ORGANIC SUBSTANCES. BY ARTHUR A. NOYES, PH.D., and SAMUEL P. MULLIKEN, PH.D. Easton, Pa.: The Chemical Publishing Co. 1897. 8 vo. 28 pp. Price 50 cents.

The authors have collected and thrown into the form of a series of laboratory experiments the various characteristic reactions for different classes of carbon compounds. Workers in organic chemistry gradually acquire a familiarity with these reactions, but the authors have performed a distinct service to the teachers of organic chemistry in bringing them together, where the beginning student can find them, and in emphasizing their importance from an analytical standpoint. This little book might be called the beginning of a qualitative analysis for the carbon compounds, a field which is not yet far advanced.

From this point of view the writer is inclined to regret that the authors did not extend their work beyond the limit of its present twenty-eight pages and make it a more complete collection of the reactions that can be used for the identification of different classes of organic bodies, and supply it with an index so that it would be of use to more advanced workers as well as to the beginners in organic synthesis. The book should find a place in every organic laboratory.

G. M. RICHARDSON.