

LABORATORY CALCULATIONS AND SPECIFIC GRAVITY TABLES. BY JOHN S. ADRIANCE, A.M. Third Edition. Revised and Enlarged. 1897. ix + 144 pp. Price, \$1.25.

This little book, which is well known to many chemists, appears in a new and somewhat enlarged edition.

Many an analyst has felt impatient at the loss of time necessary in making analytical calculations. To such this book will be found useful, containing as it does calculations for most of the reagents employed in analytical chemistry. The percentage and specific gravity tables, which are numerous, as well as the directions for preparing many reagents, will be found convenient.

It is to be regretted that the atomic weights employed by the author could not have been taken from the recent edition of Professor Clarke's "Constants of Nature," instead of his tables published in 1882. The book as it is, however, will be useful to most chemists, and should find a place in every well regulated laboratory.

J. F. MCGREGORY.

AN INTRODUCTORY COURSE OF QUANTITATIVE CHEMICAL ANALYSIS, WITH EXPLANATORY NOTES AND STOICHIOMETRICAL PROBLEMS. BY HENRY P. TALBOT, PH.D., Associate Professor of Analytical Chemistry in the Massachusetts Institute of Technology. 125 pp. New York: The Macmillan Co. Price \$1.50.

There are few readers of analytical chemistry who have not felt the need of a book which shall in a clear and concise style give the principles of quantitative analysis, and sufficient of the practice to enable the student to make his way in the larger and fuller manuals. Such a book is needed not only for those who expect to become analytical chemists, but for the much larger number who pursue chemistry in colleges, merely in course of a general education. It is hardly too much to say that it is difficult to see how a better book could be prepared for this purpose than the one before us. The general directions and the specific directions under each analysis are so clearly given that an instructor could oversee the work of a large number of students, and in each case the theory of every step is so lucidly explained that the book has a distinct educational value. The examples are well chosen and illustrate the most important methods of procedure. They are in gravimetric analysis, chlorine, iron, sulphuric acid, phosphorus pentoxide, calcium and magnesium in dolomite, lead, copper (electrolytic), and zinc in

brass; in volumetric analysis, calibration, preparation of half-normal hydrochloric acid and sodium hydroxide, soda ash, oxalic acid, iron (bichromate), chromium in chrome iron ore, iron (permanganate), pyrolusite, iodimetry, antimony in stibnite, bleaching powder, and silver (potassium thiocyanate).

The book closes with a very useful chapter on stoichiometry, containing typical problems, and a table of four place logarithms.

JAS. LEWIS HOWE.

TRAITÉ ÉLÉMENTAIRE DE CHIMIE. PAR. A. HALLER, Correspondant de l'Institut, Directeur de l'Institut Chimique de la Faculté des Sciences de Nancy, et P. Th. Muller, Maître de Conférences à l'Institut Chimique de la Faculté des Sciences de Nancy. Paris: Carré et Naud.

This work appears in two octavo volumes, the first of 336 pages, being devoted to inorganic chemistry, and the second, of 205 pages, to organic. It is a brief outline of general chemistry and presents nothing essentially new. Nevertheless, as an outline it is very complete, dealing with the entire subject in a clear and satisfactory manner, and including many topics which are usually discussed in larger text-books only. As an illustration of its scope it may be mentioned that attention is given to such subjects as argon, carborundum, and nickel carbonyl. In the volume upon organic chemistry the new nomenclature of carbon compounds is used, but this part of the work would be of greater interest to students if a systematic discussion of nomenclature were introduced. To American readers who wish to gain a knowledge of scientific French this work can be recommended. A chapter (19 pages) devoted to qualitative analysis will still further increase its value considered as a sort of introduction to French chemical literature.

FRANCIS C. PHILLIPS.

NOTES ON ASSAYING. BY PIERRE DE PEYSTER RICKETTS, E.M., PH.D. AND EDMUND H. MILLER, A.M., PH.D. viii + 311 pp. New York: John Wiley & Sons. Price, \$3.00.

The best part of this book is the part that does not treat of assaying; *viz.*, Parts III, IV, and V. These are devoted to chemical analyses, both quantitative and qualitative, blowpipe tests, laboratory extraction tests, and the usual tables, together with some new ones. Among the latter are tables of the characteristics of ores and of metals, and a table of solubilities. These features are good ones and make any laboratory handbook convenient and valuable.