

much smaller surface and is considerably lighter. When filled it weighs from 35-40 grams. The method of filling obviates all danger of contact between the solution and the rubber connections. C. E. WATERS.

BUREAU OF STANDARDS, WASHINGTON,
September 29, 1910.

NEW BOOKS.

A Manual of Volumetric Analysis, Treating on the Subjects of Indicators, Test-papers, Alkalimetry, Including Assay of Drugs by Titration, Acidimetry, Analysis by Oxidation and Reduction, Iodimetry, Determinations by Precipitation, and by Color Comparison. By VIRGIL COBLENTZ, PH.D., Pharm. M., F.C.S., Professor of Chemistry in the New York College of Pharmacy. Second edition, revised, completely reconstructed and enlarged by Anton Vorisek, Phar. D., Professor of Analytical Chemistry in the College of Pharmacy Columbia University, in the City of New York, with 37 illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1909.

"Denn was man schwarz auf weiss besitzt kann man getrost nach Hause tragen." While this suggestion was given by Mephisto to what was presumably a German student, the average American student does not have the time, or at least he thinks he has not the time to take notes for the purpose of taking them home. Neither is he content, as a rule, with such a large text as Sutton or Mohr that can be consulted in the departmental library. He is happiest when he has a textbook that does not contain much more than his immediate necessities demand.

This manual of volumetric analysis meets such a demand and meets it acceptably. Considerable information is crowded between the two covers.

In the first edition the ionic theory was applied to indicators only. In this the second edition it "has been extended to chemical reactions other than those of the indicators." Evidence of this extension is rather scarce in the text, being restricted mainly to a few pages in the chapter devoted to "Determinations by Neutralization."

"The didactic system ($H = 1,000$) of atomic weights used in the first edition has been dropped and replaced by the atomic weights of the International Committee of Atomic Weights. However, the rounded value of $H = 1.01$ for the official value 1.008 was adopted "to shorten long fractions and to facilitate calculations."

The book will, no doubt, continue to find many friends among students and teachers.

EDWARD KREMERS.

History of Chemistry. By SIR EDWARD THORPE. Two volumes, 16mo., illustrated. Vol. 1, pp. xii + 195; Vol. 2, pp. vii + 202. New York: and London: G. P. Putnam's Sons. Price, cloth, 75 cents per volume.

These two volumes by the author of "Essays in Historical Chemistry" form a part of a series of books on the "History of the Sciences," the