

various complicated methods of doubtful value, which crowd many books of this class, much to the confusion of the student. We miss a reference to Howe's modification of Doremus' ureometer, which has added so much to the accuracy and convenience of urea determinations. The illustrations devoted to the microscopical examination of sediments and casts leave room for improvement, both in quality and number. The general make-up of the book is very neat.

V. COBLENTZ.

INORGANIC CHEMISTRY. General, Medical and Pharmaceutical, Theoretical and Practical. A text-book and laboratory manual in two volumes. BY OSCAR OLDBERG, PHARM. D. Chicago: Chicago Medical Book Co. 1900. xx + 1177 pp. Price, \$7.00.

Volume I is theoretical and descriptive, being divided into three general parts, of which 314 pages are devoted to theoretical chemistry, 150 to the elements and 33 to stoichiometry. Chemical theory is treated in a very thorough and ingenious manner; however, much of this matter could be more readily grasped by the student if classified under the study of the several non-metallic elements. The employment of *approximate* atomic weights, selecting, for example, such values as 120 instead of 120.4 ( $O = 16$ ) for antimony and 206.5 instead of 206.9 ( $O = 16$ ) for lead, is not advisable in a text-book of chemistry, for it not only adds to the confusion already existing but also a promiscuous rounding off of these values for convenience sake leads to loose and inaccurate work. The chapter devoted to the periodic system is excellent.

Volume II is more properly a laboratory manual, the first part covering general chemical and pharmaceutical operations, while the second gives working methods for the preparation of 500 pharmaceutical chemicals. No general acknowledgment is made as to the source of the majority of the illustrations.

The work is eminently practical and sufficiently comprehensive to fulfil the requirements of the student and practical pharmacist. The printing and binding is excellent and reflects credit on the publishers.

V. COBLENTZ.

HANDBOOK OF PRACTICAL HYGIENE. BY D. H. BERGEY, A.M., M.D. Easton, Pa.: The Chemical Publishing Co. viii + 164 pp. Price, \$1.00.

This small work of about 160 pages, to quote the author's preface, is due to "the lack of a convenient handbook for the guidance of students in the sanitary analysis of air, water, soil,

and the principal food materials, and in testing the ventilation of buildings." The author confines himself to the simple methods used in the analysis of the substances mentioned.

The book consists of an introduction, five distinct parts, and a complete index. Part I—Atmospheric Air; Part II—Water; Part III—Soil; Part IV—Sanitary Analysis of Foods; Part V—Ventilation and Heating.

No mention is made of microscopic examinations, of waters, or of food products.

"A Brief Outline of the Sanitary Analysis of Water, Air, etc.," would have been a more appropriate title; the one used is very misleading, as the subject of hygiene is only mentioned in the historical introduction.

The book seems to be intended for the use of the medical student and "may be a means of lightening his labor in this line of study." (?)

EDWARD GUEDEMAN.

THE CHEMISTS' POCKET MANUAL. BY RICHARD K. MEADE, B.S. Easton, Pa.: The Chemical Publishing Co. 1900. vii—204 pp. Price, \$2.00.

This is almost a model work of its kind. Its excellencies are too numerous to mention; among the important ones are good paper, clear type, convenient shape, strong and handsome binding, on the publisher's side, and accuracy, good style, and clearness on the part of the author.

The contents include almost everything which a chemist or metallurgist would consult it for, the data and methods all fresh and up-to-date. Of particular merit are the graphic methods for saving calculation, composition of standard and special reagent solutions, the valuable collection of special methods of technical analysis and the copious references to recent literature.

It being possible to point out but a few of the excellencies of the work, it is almost unfair to indicate its few shortcomings. It is hardly fair to the chemist who buys the book to tell him to recognize a cyanide by pouring hydrochloric acid on it and smelling the gas! (p. 125). Some of the data are intermixed; a little rearrangement would improve the first fifty pages. It should also contain, in my opinion, tables of the heats of combinations of salts, specific heats of compounds, the properties and composition of the most common and useful minerals, and a résumé of assay methods. A marking thread would at times be found