

primary text, this work appears to the present writer to be a very valuable contribution. The consolidation of the aliphatic and aromatic divisions is an experiment in the literature well deserving to be made, and we owe thanks to the author.

The tabulation of derivatives is such as to be suggestive to the teacher and convenient for the learner. Much of it is unique, as that of aldehydes and ketones at page 170. At the close of each chapter is a list of the related laboratory exercises. The introductory chapters upon purification, analysis, and molecular weights, and upon the various physical determinations are excellent.

A. B. PRESCOTT.

NOTES ON METALLURGICAL ANALYSIS. BY NATHANIEL WRIGHT LORD, E.M. Second edition rewritten and greatly enlarged. Metallurgical Laboratory, Ohio State University, Columbus, Ohio. Price, \$2.50.

The first edition of this work was written for the use of the students in the Ohio State University, and the second edition has been enlarged to a manual covering the greater part of the methods in use in steel works laboratories. Besides the analysis of iron and steel, it contains a chapter on sampling and short descriptions of methods for the assay of copper and zinc ores.

The descriptions of the methods chosen are, as a rule, clear and in sufficient detail, and references are given in many instances to the original papers, which will prove valuable where reference libraries are within reach.

There is no index and as the running head-lines consist of the title of the book, reference to the subject-matter is difficult. There are comparatively few illustrations, and the appearance of the book is poor and lacking in finish.

ANDREW A. BLAIR.

QUANTITATIVE CHEMICAL ANALYSIS BY ELECTROLYSIS. BY PROF. ALEXANDER CLASSEN, PH.D., Privy Councillor, Director of the Laboratory of Electrochemistry and Inorganic Chemistry in the Royal Institute of Technology at Aachen. Authorized translation, fourth English from the fourth German edition, revised and enlarged, by BERTRAM B. BOLTWOOD, Ph.D., formerly Instructor in Physical and Analytical Chemistry in the Sheffield Scientific School of Yale University. New York: John Wiley and Sons. 1903. 8vo. vii + 315 pp. 102 illustrations. Price, \$3.00.

The name of Professor Classen is so indissolubly connected with the development of electrochemical analysis, and the earlier editions of this book are so favorably known that the present one