

papers presented. These discussions, as well as the papers, though largely bearing on the metallurgy of gold, and conditions incident to the location, are well worth careful study by those interested in gold mining or its metallurgy. WM. HOSKINS.

BENZOLTABELLEN. Darstellungsmethoden und Eigenschaften der einfacheren, technisch wichtigen Benzolderivate. BY DR. CARL SCHWALBE, Privatdocenten an der technischen Hochschule zu Darmstadt. Berlin: Verlag von Gebrüder Borntraeger. 1903. 266 pp. Price, 15 Marks.

The book, as stated in the introduction, is primarily for the use of the technical chemist, who has little or no time to devote to the study of the chemical literature. The author has selected about four hundred benzene derivatives—sulphonic acids, aldehydes, amines, phenols, etc.—which he considers to be of technical importance, and has given, in condensed form, their methods of preparation and the characteristic properties that serve for identification. The references to the chemical and patent literature are very complete.

As the author clearly states in his introduction, he does not try to give a description of every benzene derivative which is of commercial importance, but only those that serve as "Ausgangsmaterial" for the numerous compounds that are produced in the technical works. In the opinion of the reviewer the selection made by the author in some classes of derivatives is good, in others, compounds have been omitted which, if enumerated, would enhance the value of the book. For example: Among the sulphonic acids of nitrobenzene the author mentions, together with other acids, "1 nitro-3-5-disulfonsäure and 1 nitro-2-4-disulfonsäure" with one chemical reference, and fails to recognize the two technically important sulphonic acids, "Paranitrobenzylsulfonsäure, Darst. D. R. P. 15138, Frdl. II, 386, and Orthonitrobenzylsulfonsäure, D. R. P. 48722, Frdl. II, 98; Marckwald, Ber. 31, 1855."

Another criticism that the reviewer has to offer is that the author has made no distinction between "Darstellungsmethoden and Bildungsmethoden"; where *darstellungs* and *bildungs* methods are both given, if each were classified by themselves it would save much unnecessary reading on the part of the inexperienced chemist.

To the technical chemist the book may prove to be of some value. For the organic investigator or teacher (Academiker) the reviewer does not see the demand for such a book as the author has produced. With the means already at hand, "Beilstein, Centrall-Blatt and Richter's Lexicon," the reviewer fails to see how the book will be of immediate help to the organic chemist.

TREAT B. JOHNSON.

A SHORT HAND-BOOK OF OIL ANALYSIS. BY AUGUSTUS H. GILL, S.B., PH.D. Third edition. Philadelphia: J. B. Lippincott Co. 1903. Cloth. 159 pp. Price, \$1.50.

This handbook, the first edition of which was reviewed in this Journal (20, 237), "has been thoroughly revised and, by consultation with the literature, brought up-to-date; some sixteen pages of new matter have been added, including the latest methods of carrying out the iodine test, the bromine number, Halphen's test for cotton-seed oil, and minor changes throughout the volume."

Professor Gill's book is in no way intended to replace the larger treatises on this subject, such as Allen and Lewkowitsch, but is merely intended to be introductory to them. Necessarily, in such a small handbook, much of interest and value has been omitted, but the analytical methods that have been outlined are all of primary importance to the oil analyst.

Besides the physical and chemical tests (the discussion of which occupies a little over one-half the book), a brief résumé of the technology and properties of the more commonly occurring oils is given.

This handbook will be found particularly valuable to those just entering on a course of study in this line of work.

FREDERICK L. DUNLAP.

DISINFECTION AND THE PRESERVATION OF FOOD. Together with an Account of the Chemical Substances Used as Antiseptics and Preservatives. BY SAMUEL RIDEAL, D.Sc. (Lond.). New York: John Wiley & Sons. 1904. Third edition. 504 pp. Price, \$4.00.

The resetting of the type of this book in its third edition has given the author the opportunity of altering and revising the text wherever necessary, and adding to it whatever was thought best to make it correspond with our present-day knowledge of the subjects of which it treats. The scope of the book is wide and