Lest it should be thought that this work is a piece of special pleading in behalf of the electrolytic dissociation theory, it is but just to the author to state that though written from the stand-point of that theory, the book is not *doctrinaire*, but is broad enough to be read with much interest by all chemists, whether they agree with the author's special views or not.

Much credit is due to Dr. M'Gowan for the smooth and scholarly translation now placed at the disposal of the English reading public, which annihilates the only excuse any English speaking chemist could offer for unfamiliarity with the most important work on the theory of analysis which has ever appeared.

LAUNCELOT Andrews.

PRACTICAL PROOFS OF CHEMICAL LAWS. BY VAUGHAN CORNISH. New York: Longmans, Green & Co. Price 75 Cents.

This little work adopts a practical method for the explanation of "Dalton's Atomic Theory and the Laws of Combining Proportions." The first chapter is devoted to statements of these laws, and is followed by a chapter on the use of the balance. These prepare the student for the subsequent six chapters, which are devoted to the experimental part, in each case preceded by a list of the necessary apparatus and followed by an example and an account of the original experiments, together with references to the original literature. The experiments are well chosen, calculated to give good results with simple and inexpensive reagents and apparatus. The arrangement is a time-saving one, and where time for laboratory work is very limited, as in higher schools, this fact will figure largely.

HERMANN FLECK.

ORGANIC CHEMISTRY. THE FATTY COMPOUNDS. BY R. LLOYD WHITELEY, F.I.C., F.C.S. New York: Longmans, Green & Co. 1895. 8vo. viii, 291 pp. Price, \$1.00.

The publication of this manual, strikingly similar in purpose, arrangement and matter to the "Organic Chemistry, Part I," of Perkin and Kipping, issued last year, shows that the needs of elementary students of this department of chemistry are now recognized more generally than they have been heretofore, and indicates, perhaps, that the number of chemists, who feel able to

supply their needs, is increasing. Whether this latest effort to make a satisfactory text-book is successful, can be determined only by giving the book a trial. Without unnecessary detail, the author has furnished a clear presentation of the main facts and theories pertaining to the "fatty compounds," giving also directions for the preparation in the laboratory of many compounds, and methods for their identification. These directions are generally clear and accurate.

The discussion of stereochemical theories is hardly full enough even for an elementary book, and the average student would probably find the chapters on the polyhydric alcohols and their derivatives more intelligible and interesting, if some of the methods recently employed for their synthesis and study, had been briefly explained. The book is attractively printed, and has a satisfactory index.

L. B. HALL.

## BOOKS RECEIVED.

How to Disinfect: A guide to practical disinfection in every-day life, and during cases of infectious illness By C. T. Kingzett, F. I. C., F. C. S. New York: The American and Continental "Sanitas" Co., Ltd. Price ten cents.

Elements of Modern Chemistry. By Charles Adolphe Wurtz. Fifth American edition. Revised and enlarged by Wm. H. Greene, M. D., and Harry F. Keller, Ph. D. Philadelphia: J. B. Lippincott Co. 808 pp. Price \$1.80.

Nineteenth Annual Report of the Connecticut Agricultural Experiment Station. Part II. Fertilizers. New Haven: Tuttle, Morehouse and Taylor Press. 74 pp. 1895.

Bulletin No. 58. Cutworms in Kentucky. Kentucky Agricultural Experiment Station. Lexington, Ky. 1895. 21 pp.

Bulletin No. 118. Cottonseed Hulls and Meal for Beef Production. North Carolina Experiment Station. Raleigh, N. C., July 1895. 37 pp.

Bulletin No. 119. Volumetric Estimation of Phosphoric Acid. North Carolina Agricultural Experiment Station. Raleigh, N. C., August, 1895, 24 pp.