activity. Fortunately, or unfortunately, the explanation is so befogged with statements about electro-negativeness and electro-positiveness that no application, correct or incorrect, to chemical behavior is likely to be made.

The laboratory manual covers a great deal of ground. A few questions are appended to each experiment. Some quantitative experiments are given, but they are at the end of the book.

The typography, illustrations, and binding of both books are excellent.

ALEXANDER SMITH.

DISINFECTION AND DISINFECTANTS. A PRACTICAL GUIDE FOR SANITARIANS. HEALTH AND QUARANTINE OFFICERS. BY M. J. ROSENAU, M.D. Philadelphia: P. Blakiston's Son and Co. 353 pp. Price, \$2.00 net.

The author of this book is connected with the United States Marine Hospital Service, as Director of the Hygienic Laboratory, and has had abundant opportunity to observe practically what he has written about. The work is divided into six chapters of which the first three treat of the various disinfecting agents in general use. The opinions of the author in discussing the applicability and relative merits of the substances considered seem eminently sound and practical. The fourth chapter deals with means for destroying insects which carry diseases. The fifth chapter gives clear directions for disinfection of houses, ships. railway cars, furniture, clothing, books, etc., and is very satisfactory. The sixth and last chapter deals with the question of disinfection after special diseases, and for each one the most efficient treatment is suggested. The book is illustrated and is well printed. On the whole it may be recommended to those in need of information in this direction. J. H. Long.

DIE ZERSETZUNG STICKSTOFFFREIER ORGANISCHER SUBSTANZEN DURCH BAKTERIEN. BY DR. O. EMMERLING. Braunschweig: Friedrich Vieweg und Sohn. 141 pp. and 7 plates. Price, 4 marks.

This little book describes the important group of decompositions usually classed as fermentations in which the active agents are not true ferments, in the modern sense of the word, but bacteria. The best known examples of such reactions are the acetic, lactic, butyric and gummy fermentations, in which carbohydrates or their derivatives are the materials on which the bacteria work. The author discusses these changes and several