have been learned. The treatment of the topics is frequently so meagre that even an advanced student would have difficulty in comprehending it. The periodic law, the ionic theory, the Kjeldahl method for the determination of nitrogen and many other important subjects are either not mentioned, or are skilfully concealed. There are so many good text-books in English, French and German, that this new candidate for favor seems unlikely to secure a prominent place.

L. B. Hall.

THEORETICAL CHEMISTRY FROM THE STANDPOINT OF AVOGADRO'S RULE AND THERMODYNAMICS. BY WALTHER NERNST. Revised in accordance with the fourth German edition by R. A. Lehfeldt. xxiv + 771 pp. London: Macmillan & Co.; New York: The Macmillan Co. Price, \$3.75 net.

No English translation of this standard work upon the general principles of chemistry and upon physico-chemical relations has appeared since shortly after the issuance of the first German edition in 1803. Since that time the original work has been so much modified and extended that the former translation has become entirely antiquated, and that the present one may be regarded as substantially a new book. It is, therefore, not worth while to review in detail the differences between the two publications. It will suffice to call attention to the fact that the English reader has now available to him a translation of the most recent edition of one of the leading German works upon theoretical chemistry a work which is of great value for purposes of reference, and which as a textbook is especially suited to the somewhat advanced student who wishes to make a fairly thorough study of the subject. The translation of the portions of the book added or rewritten since the first edition is fairly satisfactory; that of the original portion, which unfortunately was only partially revised by the new translator, is often scarcely intelligible. A. A. Noyes.

STUDIES IN GENERAL PHYSIOLOGY. BY JACQUES LOEB, formerly of the Department of Physiology in the University of Chicago; Professor of Physiology in the University of California. Decennial Publications of the University of Chicago, Second Series, Volume XV. In two volumes. Chicago: The University of Chicago Press. 1905. 782 pp. Price, \$7.50 net.

The appearance in book form of the brilliant work of the author along the lines of general physiology will be welcomed by physiologists and other scientific men, who are in touch with physiological literature. So many popular accounts have appeared from sensational journalists, without Loeb's knowledge or consent, that