employed in pharmaceutical and medico-chemical practice, but contains much to make it a useful addition to the library of any analyst. Its value is greatly enhanced by the addition of the alphabetical subject index.

S. P. Mulliken.

Vorlesungen über Theoretische und Physikalische Chemie. Von J. H. van't Hoff. Zweites Heft. Die Chemische Statik. Zweite Auflage. Braunschweig: Friedr. Vieweg und Sohn. Ladenpreis, geheftet, Mk. 4.

The second edition of the second part of this set of lectures differs very slightly from the first edition, the differences being mainly in choice of illustrative examples cited in the text, for which recognition of more recent work calls, and in the increased number of references. The chapter on solid solutions is the most conspicuous in both respects. A few typographical slips occur in the second edition which do not appear in the first, and curiously enough the second edition omits the references to Brunis' work (pages 68 and 70) mentioned in the text, though the reference is given in the first edition. The leading of the tables in the second edition seems to be an improvement, and the press work as a whole is quite satisfactory. The few changes made in this new edition of a well-known work do not justify any extended or detailed notice, but the opportunity can not be passed of insisting upon the great value of this work to the general chemist.

statics under Considering chemical the three headings. Molecular Weights. Molecular Structure, Molecular Grouping, the author has discussed the modern theory of solutions, gaseous, liquid and solid, stereochemistry, and physical crystallography, subjects usually treated as widely variant in character, and with but incidental points of contact, but which are here brought into a comprehensive whole. There are probably few indeed who will not find their mental horizon considerably widened by the careful reading of this volume, and with its two companion ones on "Chemical Dynamics" and "The Relations between Properties and Composition" it should well repay an occasional re-reading. FRANK K. CAMERON.

ELEMENTS OF PHYSICS. BY ERNEST J. ANDREWS and H. N. HOWLAND. With Manual of Experiments. New York: The Macmillan Company. 1903. Price, \$1.10 net.

The general plan of this new addition to the large number of

elementary texts on physics is "to eliminate a few subjects which have no practical bearing, and the relations of which to the fundamentals cannot well be made apparent; to present difficult subjects fully and in simple terms; and to connect each subject, directly or indirectly, with every other by fundamental principles or their corollaries."

This plan has been carefully and conscientiously followed and the resulting book is on the whole to be recommended. The weakest part is the "Manual of Experiments," but as most schools use a separate manual, this cannot be accounted a serious defect.

C. E. LINEBARGER.

A Text-Book of Organic Chemistry. By Dr. A. F. Holleman. Translated from the Second Dutch Edition by A. Jamieson Walker, Ph.D., assisted by Owen E. Mott, Ph.D., and with the coöperation of the author. New York: John Wiley & Sons. 1903. 72 figures. Cloth. 8vo. xvii + 555 pp. Price, \$2.50.

The purpose of the author is to bring out distinctly the underlying principles upon which the division of the subject is based, the experimental proof for the constitutional formulas assigned, the bearing of physico-chemical theories upon the problems of organic chemistry, and the like, rather than to describe a large number of compounds or record a confusing mass of isolated facts; in a word, to provide a text-book which should give a clear presentation of the theoretical aspects of organic chemistry, rather than a condensed "Beilstein." The author's purpose has been carried out with very satisfactory results in the present work, an excellent text-book, widely and favorably known, this new edition being as nearly up-to-date as can reasonably be expected of any text-book. A second German edition has already appeared of the work, and an Italian translation is in preparation; English-speaking students will therefore be grateful to Messrs. Walker and Owen for this translation of the latest Dutch edition. The publishers' work is well done, the book being gotten up in very attractive form, clearly MARSTON T. BOGERT. printed on good paper.

SIDEROLOGY: THE CONSTITUTION OF IRON ALLOYS AND SLAGS. BY HANNS FREIHERR VON JUPTNER. Translated from the German by CHARLES SALTER. London: Scott Greenwood & Co.; New York: D. Van Nostrand Co. 1902. viii + 344 pp. Price, \$5.00.

The original edition of this book has been reviewed in this