LEAD AND ITS COMPOUNDS. BY THOMAS LAMBERT. London: Scott, Greenwood & Co.; New York: D. Van Nostrand Co. 1902. 228 pp. Price, $3.50.

Some seventy pages of this book are taken up with a description of the dressing of lead ores and the metallurgy of lead.

A chapter on lead oxides and their manufacture follows, and fifteen pages are devoted to substitutes for white lead. A brief account of the metallurgy of zinc follows, including a description of compounds used as pigments, and of pumice stone, china clay, etc.

Drying oils, siccatives and turpentine are briefly discussed. A classification of mineral pigments and a chapter on the analysis of raw and finished products close the book. The tables at the end are of little moment.

Inasmuch as this book contains nothing which is not more fully and authoritatively treated in other easily accessible works, it can be of little use to the American chemist or metallurgist, but is evidently designed to contain general information of interest to those engaged in the manufacture of paint from lead and zinc compounds. WM. HOSKINS.

TESTS AND REAGENTS, CHEMICAL AND MICROSCOPICAL, KNOWN BY THEIR AUTHORS' NAMES, together with an Index of Subjects. BY ALFRED I. COHN, PH.G. New York: John Wiley & Sons. 1903. 8vo. Cloth. 353 pp. Price, $3.00.

The object of this book, as stated by its author, is "To supply the busy chemist, microscopist, and pharmacist with data which are frequently desired, but which are often not at hand or are inaccessible." The tests and reagents are arranged alphabetically under the names of their originators. Their number is estimated to be not far from 2,500. The descriptions are necessarily all very compact, but the work of condensation has been well done—a fact which in a measure compensates for the usual omission of bibliographical references.

The following selected topics will serve to illustrate the nature of the matter abstracted: Hager, "Test for Dextrine in Acacia"; Halphen, "Cottonseed Oil"; Hammersten, "Indican in Urine"; Haug, "Decalcification Solution"; Hefelmann-Mann, "Fluorine in Beer"; Hayem, "Solution for Fixing Blood Corpuscles."

The book is especially complete in its list of tests and reagents

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.

Considering chemical statics under the three general headings, Molecular Weights, Molecular Structure, and 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