

centage of iodine" (p. 132): $4 \frac{0}{100}$ becomes four per cent. (p. 527); "Hyperglukämie" is given as glucohemia (p. 309). It is unfortunate that the word "albumins" has been retained in the generic sense by the translators, and that nucleoprotein appears in one part of the book, with protein in another. The adopted rules of spelling have not been rigorously followed. Thus of two protamines, one becomes salmine, the other clupein (p. 130). Such details are however, of minor account in a book which deserves cordial recommendation for unusual novelty in presentation, entertaining originality, and suggestive points of view. We need more books which propound problems as well as solve them.

LAFAYETTE B. MENDEL.

A Text Book of Inorganic Chemistry. BY A. F. HOLLEMAN. Issued in English in coöperation with H. C. Cooper. Third English edition, partly rewritten, 8vo, viii + 502 pp., 81 figures. New York: John Wiley and Sons. Price, \$2.50.

According to the statement of the preface, this edition represents a thorough revision of the work by both the Dutch author and the American editor. The portions on the phase rule, spectroscopy, radioactivity, iron-carbon system and metal-ammonia compounds have been largely rewritten and the chapters on colloids, experimental determination of equivalent weights and unity of matter are entirely new. In view of what has been written by some chemists of eminent authority it is refreshing to find one who states that it is the province of science to seek an explanation of phenomena and that "the various attempts at explanations constitute the most important part of science." A little further on, however, we find the statement that "the principle of the indestructibility of matter lies originally at the basis of our thinking. It is entirely incorrect to suppose that it was established by experimentation." This can scarcely be considered as true, historically—nor is it entirely consistent with recent speculations about the relation between matter and energy, which are referred to, later, in the book. The book as a whole gives a very satisfactory presentation of fundamental principles and of the more important facts of chemistry, including important recent discoveries and suitable reference to some of the newest speculations connected with these.

W. A. N.

Die Lagerung der Atome im Raume. VON J. H. VAN'T HOFF. Dritte umgearbeitete und vermehrte Auflage. Vieweg u. Sohn. 1908. S. xv + 147. Preis geheftet, M. 4.50.

In the preparation of this new edition Prof. van't Hoff was assisted by Dr. Just. The text of the previous edition has been largely rewritten and much new material added, so as to bring it well up to date. This is particularly true in the fields of enzyme action and of the stereochemistry of elements other than carbon. The chapter on cyclic binding now

precedes that on ethylenic compounds. The book is too well and favorably known to require further extended comment.

MARSTON TAYLOR BOGERT.

A Text-book of Experimental Chemistry (with Descriptive Notes). For Students of General Inorganic Chemistry. By EDWIN LEE, Professor of Chemistry in Allegheny College. With 57 illustrations. Philadelphia: P. Blakiston's Sons & Co. 1908. pp i-xv + 433. Price, \$1.50 net.

The purpose and scope of this book are set forth in the preface as follows: "It grew originally out of a personal demand for a text-book which would embody: (a) a clear, accurate, and comprehensive presentation of the fundamentals of the science; (b) specific directions for laboratory work, coupled with such questions as lead the student to observe, compare, and generalize, and would therefore provide a method for the scientific development of the principles under discussion; (c) a sufficient amount of discussion and application of the principles involved in the experiments to foster the interest and to direct the observations that energy may not be spent indiscriminately; and (d) those physico-chemical generalizations which are essential to the explanation of much of the phenomena of inorganic chemistry. This book represents an endeavor to meet these requirements. It is not intended that it shall take the place of a large descriptive work or the instruction of the teacher; on the contrary, it is designed to provide, primarily, an experimental course in general chemistry, and by the use of 'descriptive notes' and questions *vitally relate* it to the lecture-room work."

The author has succeeded in writing a book which is unlike any other experimental chemistry with which the reviewer is acquainted. While a large number of experiments, which in the main are well chosen, are included, the descriptive notes, so called, appear to be the chief and unusual feature of the book. These are more than notes. They are lengthy discussions of theory and rather full descriptive accounts of elements and compounds, appropriate to a text-book of general chemistry. Separate chapters are devoted to fundamental concepts; energetics of chemistry; science, its methods of development, classification; laws and chemical equivalents; chemical equilibrium, reversible reactions, mass law, dissociation; and classification of the elements. Great emphasis is put on modern physical chemistry. Fifty pages are given up to a consideration of solutions, which includes an account of the historical development of the theory of electrolytic dissociation. The beginner is introduced to such subjects as the probable source of the energy of solutions, association in solution, LeChatelier's theorem, ionic equilibrium, colloids, osmotic pressure, critical solution temperature, law of distribution, Raoult's law, calculations of molecular weights from freezing-point determinations,