

**CORRECTION.**

*The Ethyl-Sulfuric Acid Reaction*, THIS JOURNAL, **39**, 456. The authors desire to add a reference to the physico-chemical investigation by R. Kramann (*Monatsh. Chem.*, **31**, 245) unfortunately overlooked.

P. N. EVANS AND J. M. ALBERTSON.

**NEW BOOKS.**

**General Chemistry for Colleges.** By ALEXANDER SMITH. Second Edition, entirely rewritten. New York: The Century Co., 1916. Pp. x + 662.

In noting the appearance of the second edition of this well-known college text, it is only necessary to point out the changes which have been made in it as the result of the experience gained through its use for eight years. The book has been largely rewritten, and the presentation of certain parts of the theoretical side of the subject have been markedly simplified. The discussion of atomic and molecular weights is much better adapted to the understanding of the first-year student in chemistry than that given in the first edition of the book. The author has not, however, modified so freely the consideration of subjects which are treated in the latter part of the book. While the simplifications introduced will be the changes most welcomed by the teacher, others have been made which add to the value of the book. The historical references have been expanded, and more applications of chemistry have been discussed. New sections on oxidation and reduction, on various methods of writing equations, on radioactivity, and on electrochemistry have been added. Brief sections on atomic numbers, colloids, foods, explosives, and many other subjects have been introduced. The revision of the book has greatly increased its value as a text for the beginner in the study of chemistry. JAMES F. NORRIS.

**Introduction to Inorganic Chemistry.** By ALEXANDER SMITH. Third Edition, rewritten. New York: The Century Co., 1917. Pp. xiv + 925.

In this new edition the author has brought the subject matter up to date, and has given as full an account of the recent development of the science as is consistent with a general treatment of inorganic chemistry. The introductory chapters of the book have been modified, and the paragraphs in small type devoted to the consideration of terms and definitions, and to trenchant criticisms of the loose expressions used by many chemists, have been amplified. These changes have resulted in an increase in the size of the book, which contains 165 pages more than the first edition; they also enhance the value of the book to the reader who has acquired an elementary knowledge of inorganic chemistry. The reviewer has used with success the earlier editions of the book in connection with a course in inorganic chemistry given to fourth-year college students. The course served to review and amplify the students' knowledge of inorganic chemistry and to correlate with it the work given in courses in

physical chemistry. The new edition of the book will be even better adapted to this use than the earlier ones. The existence of Professor Smith's "General Chemistry for Colleges" relieves the author of the necessity of considering primarily the beginner in fixing upon his method of treatment and the fullness of his discussions. The "Inorganic Chemistry" can be read with keen interest and clear understanding by the student who has devoted a year or more to the study of the science.

JAMES F. NORRIS.

**Elementos de Fisica Geral, Para Uso de 6<sup>a</sup> E 7<sup>a</sup> Classe Dos Liceus Portugueses, Ginasios E Escolas Normais Brasileiras.** Por F. J. SOUSA GOMES, Dr. en Filosofia Nat, Soc da Acad de Ciencias, etc., E. ALVARO R. MARCHADO, Bel en Filosofia e Medicina, Prof. de Liceu Rodrigues de Freitas, etc., 2 Edicao Refundida E Ampliada. (Elements of General Physics, for Use in the Sixth and Seventh Grades of the Portuguese Lyceums, Gymnasia and Normal Schools of Brazil. By F. J. SOUSA GOMES, Doctor in Natural Sciences, Member of the Academy of Sciences, etc., and ALVARO R. MARCHADO, Bachelor in Natural Philosophy and Medicine, Professor in the Rodrigues Lyceum of Freitas, etc. Second Edition Revised and Enlarged.)

The subjects of this review are the 2nd and 3rd volumes of a Text-book of General Physics, the first volume of which was reviewed in a former issue of THIS JOURNAL (April, 1916). Volume 2 treats of Sound (Acoustica) Light (Optica) and Heat (Calor). Volume 3 of Electricity and Magnetism.

Sound, to which 52 pages are devoted, is discussed under the headings of Production and Propagation—Reflection and Refraction Characteristics of Sound—Musical Scales and Musical Instruments.

Light is discussed under the subdivisions of Origin and Propagation—Reflection—Simple Refraction of Monochromatic Light Properties of Radiation and Nature of Radiant Energy.

The sequence of the treatment of Heat is rather unusual, this being Origin and Propagation of Heat, Theory of Thermal Dynamics and of Calorimetry—Expansion—Thermometry and finally Changes in State of Aggregation.

In Volume 3 the subjects of Electricity and Magnetism are treated in a rather exhaustive manner, in 238 pages, under the subjects of Electrostatic field—Electrostatic machines—Electric current and its conduction in a homogeneous circuit—Reciprocal transformations of chemical and electrical energy—Thermo- and Photo-electricity—Under magnetism, Electro magnetism and Electro Dynamics—Electrodynamic and magnetic induction—Electric Waves—Wireless telegraphy.

Volumes 2 and 3, like the 1st volume, are liberally supplied with excellent cuts and diagrams, the lettering of these being adequate and clear cut. The work presents abundant evidence of painstaking care in its preparation. It will no doubt meet fully the purposes for which it is intended.

WM. N. BERKELEY.