scription of the experiments, the inorganic chemist cannot fail to be impressed with the laborious and time-consuming character of many of them as compared with the numerous relatively simple and rapid ones available in his own field.

The book should prove useful to all teachers of organic chemistry.

MARSTON TAYLOR BOGERT.

Calculations of General Chemistry. WILLIAM J. HALE. New York: D. Van Nostrand Company. pp. 174. Price, \$1.00.

This book is designed for use during the first year of the student's progress in the study of chemistry. It comprises the units of measure, and the calculations based on density and specific gravity; effect of pressure and temperature on gases; Avogadro's hypothesis; law of definite proportions; derivation of formulas; chemical equations; normal solutions; combination of gases by volume and closes with an appendix giving a table of logarithms. The treatment is clear and concise and the volume will be of service to students.

In the calculations of density the author uses oxygen as the standard. He says: "Formerly hydrogen, as the lightest substance served this purpose, and consequently the close relationship between densities and molecular weights was apparent. In recent times oxygen, with the value of 32, has been adopted as the basis of molecular weights by reason of the great importance of this element in its numerous combinations with other elements and for reasons that will be made clear after further considerations."

The reasons for making oxygen the standard for densities are no clearer than those for making it the standard for atomic weights. Hydrogen is the only standard that is rational and scientific and the use of oxygen as a standard leads the student to confusion only. It is unfortunate that, even among scientists, a fad or fancy promulgated by some man of prominence so often finds many eager followers. WM. L. DUDLEY.

An Introduction to Physical Science. By FREDERICK H. GETMAN. John Wiley & Sons, New York. 1909. Price, \$1.50.

The author has written this little book to meet the difficulties of beginners in chemistry by giving, in logical order, the physical principles which are most important for an intelligent study of chemistry. Seventy-eight pages are devoted to mechanics, 35 of which are concerned with gases and liquids. Sixty pages are devoted to heat and thermodynamics, while light electricity and magnetism are considered in the remainder of the 250 pages. Each chapter is concluded with a number of good problems and questions. If a student were acquainted with the contents of this book he would be well prepared to take up a study of chemistry, but it is not plain just when there will be time to devote to a course of