time than it now does by the natural method. The most pernicious and untenable application of this idea appears when he claims that a child's attention should be focused upon the exact mistake he has made in previous repetitions.

In spite of these and some other less important mistakes and misplacements of emphasis, the book is a fresh, stimulating and generally correct organization of the principles of education.

WILBUR S. JACKMAN.

The Study of Chemical Composition. By IDA FREUND, Staff Lecturer and Associate of Newnham College. Cambridge, University Press. 1904. 8vo. Pp. xvi + 650.

This book presents an account of the method and historical development of the study of chemical composition. The initial discoveries forming the basis of the modern views of the composition of bodies are described, and the methods by means of which further experimental facts bearing upon the subject were obtained are clearly set forth. The historical development of the important laws is traced by showing how these grew from the study of certain classes of phenomena. In the course of this presentation many well-chosen quotations from classical original articles, including actual experimental data obtained, are given in sufficient detail to enable the reader to form an idea as to the degree of accuracy attained in the experiments which are of special consequence. Though the historical method of treatment has been adopted, no attempt has been made to secure such completeness or proportion as to deserve the name of history. The aim has been to describe only the most vital discoveries, and to do this thoroughly, rather than to dwell upon a greater number of facts.

A carefully written introduction of thirty pages devoted to a discussion of the method of inductive sciences prefaces the nineteen chapters in which the subject matter is treated. The first eight chapters deal with theories of combustion and the composition of bodies by weight. Here the work of Lavoisier, Dalton, Richter, Berthollet, Proust, Stas, Morley and others is described. Chapter nine presents the views concerning the constitution of matter held prior to 1800, and the following chapter deals with Dalton's atomic theory. Chapters eleven to thirteen relate to the combination of gases by volume, the work of Avogadro and Cannizzaro, and the molecular hypothesis. After detailing the discovery of Dulong and Petit in chapter fourteen, the subjects of isomorphism, periodic law, valency and isomerism are treated in the chapters following, and the book is fittingly closed with a final chapter setting forth the modern views concerning the ultimate constitution of matter and the genesis of the elements.

Throughout the book, facts and theories have been sharply and clearly separated from each other, a matter of vital importance in a treatise of this nature. The treatment is concise, clear and conservative, yet none the less interesting. The book can be heartily recommended to students of physical science and others desiring a reasonably condensed presentation of the existing views of chemical composition. Like the other volumes of the Cambridge Physical Series, the book is well printed.

LOUIS KAHLENBERG.

SCIENTIFIC JOURNALS AND ARTICLES.

The American Naturalist, with the exception of the *American Journal of Science,* the oldest of the American scientific periodicals, announces a change in its editorial management. Dr. William McMichael Woodworth, who has so acceptably filled the position of editor-in-chief since 1898, retires and his place is taken by Dr. Glover M. Allen, the secretary of the Boston Society of Natural History. All correspondence intended for the editorial department should be directed to *The American Naturalist,* Cambridge, Mass.

THE October issue of the *Journal of Nervous and Mental Disease* opens with a report by Dr. Frank R. Fry of a case of cerebral tumor which presented some puzzling symptoms which led to the belief that the tumor was located in the left cerebellum, whereas the autopsy discovered it occupying the greater part of the site of the left inferior