

conclusions of physics and chemistry, and, in addition, must devote not a little time and labor to studying the application of the more general laws of these sciences to the special phenomena of plant and animal life. In this text-book the author has summarized briefly the principal conclusions of the inorganic sciences, devoting special attention to those laws on which the higher science of biology is founded, and has endeavored to keep prominently in the foreground the dependence of biology on physics and chemistry, and the relationship of morphological and physiological details to general principles.

Matter, energy, the classification of chemical compounds, and the laws of chemical change, are discussed in the first chapter; and the author then proceeds to consider protoplasm in its many and varied aspects. Individual and tribal life, with distribution and classification, are thoroughly treated.

The *Proteita*, *Protophyta*, *Protozoa*, *Metaphyta*, and *Metazoa* are described in most minute detail. The illustrations are excellent, and are to a great extent original. The typography and general execution of the book leave nothing to be desired. As a text-book of elementary biology, it is one of the best that have ever been published.

*Chemical Lecture Notes.* By PETER T. AUSTEN. New York, Wiley. 12°. \$1.

THIS book is not intended as a text-book, but is simply a collection of notes and observations on certain topics, which, experience as a teacher of chemistry in Rutgers College and the New Jersey State Scientific School has shown Professor Austen, give the student more or less trouble. While no attempt has been made to include all the rocks and shoals on which chemical students suffer shipwreck, still the author has succeeded in making lucid many of the topics which are not rendered sufficiently intelligible by the average text-book. Valence, atomicity, the laws of Boyle, Charles, and Mariotte, can no longer be a mystery to a student of these lecture-notes. We recommend them to those who have found difficulty in comprehending the intricacies of modern chemistry, and equally to those who would escape the hard places in this science, so numerous even when studied with the best of helps and teachers.

#### AMONG THE PUBLISHERS.

WE have received from A. Lovell & Co. "Greene's Language Half-Blanks, No. 1," by H. R. Greene, a pamphlet designed to teach the elements of English grammar by means of exercises and diagrams. Examples are given of the parts of speech, and the construction of the sentence is duly explained, and the pupil is then to write short sentences, the principal words being furnished him to illustrate what has been told him. These sentences are to be arranged in tables, and the different elements of the sentence indicated by certain marks written under the words. What the precise value of Mr. Greene's system may be, experience must decide; but marks and diagrams have no connection with language as such, and can at best be nothing more than very slight helps. The book is one of a series ending with a full grammar.

—Messrs. Ginn & Co. of Boston have issued "An Introduction to the Poetry of Robert Browning," by Professor William J. Alexander of Halifax, N.S. The author remarks on the difficulty experienced in understanding any new writer, and on the special difficulty of understanding Browning because of his obscurity; and he has prepared this work with the object of clearing up some of these difficulties, and making his author more comprehensible to the mass of readers. He finds the chief motive of Browning's work in his belief in the central doctrines of Christianity, which he has endeavored to illustrate and enforce. One chapter is given to Browning's philosophy, and another to his theory of art; and the remainder of the book is devoted to an account of his mental development as exhibited in his various works.

—D. Appleton & Co. will publish immediately a treatise by the Hon. Seymour Dexter of Elmira, N.Y., on "Co-operative Savings and Loan Associations," which will include an examination of building and loan associations, mutual savings and loan associations, accumulating fund associations, co-operative banks, etc.

The appendix will contain laws of New York, Pennsylvania, and Massachusetts, forms for Articles of associations, by-laws, account-books, and other useful information on the subject. The author, who is judge probate of Chemung County, has been president of the Chemung Valley Mutual Association for fourteen years, and is high authority on the subject of which he treats. They also announce "A Manual of Instruction in the Principles of Prompt Aid to the Injured," designed for military and civil use, by Dr. Alvah H. Doty; and a new book by Mr. O. B. Bunce, entitled "The Story of Happinoland and other Legends," which is to be issued in the Gainsborough Series. The latter consists of four slight sketches, — "The Story of Happinoland" (which, being translated, is "Happy-no-land"), "A Millionaire's Millions," "The City Beautiful," and "John's Attic;" all of which, the latter, however, only slightly, involve questions in social science.

—Harper & Brothers have ready this week a concise instructive work on "Constitutional Government in Spain," by J. L. M. Curry, LL.D., predecessor of Mr. Perry Belmont as minister of the United States in Spain. It is the result of some years of close study of the subject, and of actual observation of Spanish political and social life during the author's official residence in the country. Valuable appendices are added, summarizing the careers of aspirants to the Spanish throne, — Fernando, Leopold, Duke of Montpensier, and Amadeo; giving sketches of Christina, Isabel, Alfonso XII., the Infantas, the Queen Regent, and Alfonso XIII.; describing the present condition of Spain in its political, social, and industrial aspects; and, lastly, explaining briefly the acquisition of Florida by the United States. They have also just ready "Choice Cookery," by Catherine Owen, author of "Ten Dollars Enough," etc., the object of which is to help those who wish to know at a glance what is newest and best in modern cookery.

—David McKay, Philadelphia, will shortly publish a new edition of Joel Cook's "Holiday Tour in Europe," formerly published by Porter & Coates.

—The *American Magazine* suspended publication last December.

—*The Index*, published by E. R. Walker, Chicago, is a little four-page monthly paper that will attempt to take "a glance at the leading features of the forthcoming periodicals."

—*Once a Week* has been enlarged, and includes a greater variety of contents. The most noticeable thing in the current number is the first instalment of a Stockton story, called after its heroine, "Ardis Claverden."

—*The Advance Sheet*, published by C. A. Watson, New York, will attempt to give a monthly survey of periodical literature, indexing the contents of the leading periodicals for the next month, with such comments as will make the announcements as attractive as possible.

—The two new volumes of "Letters of Carlyle" which Professor C. E. Norton has edited are mostly addressed to the various members of Carlyle's family, and afford a tolerably continuous account of his life from his marriage to the period when his fame was about to be established by the publication of his "French Revolution." Messrs. Macmillan are to publish them speedily.

—The new edition of Queen & Co.'s "Chemical Apparatus Catalogue" is now published. It contains 368 pages, with about 1,200 illustrations, and will be mailed to any address on receipt of fifty cents, which sum will be deducted from the first purchase made from it amounting to ten dollars or more. This is a very elaborate work, containing the most useful apparatus, and the firm feels confident that it will be considered by chemists a standard for reference. While the quality of the apparatus is maintained, most of the prices have been reduced.

—In the *Contemporary Review* for March (New York, Leonard Scott Publication Company), interest centres in the paper on the "Panama Canal," by Edward Whymper, with its intelligent diagrams and maps; Archibald Forbes criticises some of Lord Wolseley's recent utterances; Dr. Dale continues his interesting papers on Australia; Canon Wilberforce treats of Ireland's demands; and Mr. Clerke describes the observatory at the Cape of Good Hope.