

*Practical Chemistry: Fundamental Facts and Applications to Modern Life.* By N. H. Black and Dr. J. Bryant Conant. Pp. xi+474. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd., 1920.) Price 11s. net.

THE title of "Practical Chemistry" might lead to the impression that the book, written by two American teachers, was a laboratory manual. That is not the case. The text-book is an admirably clear and interesting introduction to chemistry, in which, it is true, the practical applications of the subject are not neglected. The attitude of the authors is completely modern, and the appearance of the book is greatly improved by numerous well-executed illustrations, and reproductions of photographs of actual plant and apparatus used in industry. Portraits of famous chemists, brief historical details, and numerous experiments are given. At the end of each chapter is a list of "Topics for Further Study," which often contain interesting suggestions. Any attempt to stimulate thought is welcome in a text-book, and the present volume is rich in such efforts.

In addition to a careful and accurate account of the familiar topics, many recent discoveries are included in a very readable manner. For instance, accessory factors in diet, the purification of water by chlorine, the hydrogenation of oils, the cleansing power of soap, and the really practical processes used in the fixation of nitrogen are all discussed in sufficient detail to make them intelligible. A useful summary is added to each chapter, together with a list of interesting questions. The authors are to be congratulated on producing a really interesting book; clear and accurate, with a freshness of treatment which is grateful to the hardened reader of elementary text-books. As an introductory text-book for elementary students, and for use in the higher forms of schools, this may with confidence be recommended.

J. R. P.

*Physiology.* By Dr. Ffrangcon Roberts. (Students' Synopsis Series.) Pp. viii+389. (London: J. and A. Churchill, 1920.) Price 15s. net.

THE student of physiology has such a wide choice of text-books dealing more or less exhaustively with the subject that the entry of a new volume into the list might be regarded as unnecessary. This book, however, is intended to meet a special need incurred by the growth of the science. The application of physical and chemical methods to the elucidation of the problems of the body, the war-time accumulation of new facts and ideas, and the advances in the sister sciences have so altered the material and increased the size of the new editions of the standard text-books that an orderly arrangement is in danger of being obscured by the mass of detail. This is a real difficulty to the student, and furnishes a valid reason for the issue of this volume of the Students' Synopsis Series. The book is definitely intended to supplement, and not to supplant, the larger

text-books. It assumes that the student has already an acquaintance with the elements of physiology and has had some experience of practical work. It also assumes that he has a considerable knowledge of physics and chemistry, without which its treatment of such a topic as the reaction of the blood, though ably presented, would by its brevity fail to convey the necessary instruction. The book admirably fulfils its purpose, and Dr. Roberts is to be congratulated upon his success in accomplishing the difficult task of compiling a summary of the salient facts of physiology which is readable, clear, concise, and up to date. The volume is well edited and its illustrations are apposite.

P. T. HERRING.

*Landscape Architecture.* By Prof. H. V. Hubbard and Theodora Kimball. Pp. 132. (Cambridge, Mass.: Harvard University Press; London: Oxford University Press, 1920.) Price 6s. 6d. net.

THIS work sets out to provide a comprehensive classification of the field of landscape architecture, and attempts to show in detail both the "subjects making up the field, and the relation of the field itself to tangent fields." The scheme resolves itself into a series of some thirteen to fourteen hundred headings, under which published literature, notes and other manuscript material, maps, plans, photographs, and other pictorial matter may be arranged. These headings are placed in groups according to their relationship with each other, and the groups themselves are classified. Landscape art must be much more highly organised in the United States than it is here to justify the publication of such an elaborate scheme as this, the chief *raison d'être* of which is the convenient docketing of papers in one form or another. We doubt if there are half a dozen firms of landscape gardeners in this country whose accumulation of material is so extensive as to need extraneous assistance in arranging it, but to any such this work is no doubt capable of affording valuable suggestions. It shows, at any rate, how extensive is the area covered by landscape art, and how far-reaching are its ramifications when followed out to their full extent.

W. J. B.

*Nucleic Acids: Their Chemical Properties and Physiological Conduct.* By Prof. W. Jones. Second edition. (Monographs on Biochemistry.) Pp. viii+150. (London: Longmans, Green, and Co., 1920.) Price 9s. net.

SINCE the first edition of this monograph was reviewed in NATURE for April 1, 1915, our knowledge of physiological chemistry has been considerably extended. The four hypothetical nucleotides required by the nucleotide theory of the structure of plant nucleic acid have now been prepared, and new facts regarding the purine fermentation in various animals have been brought to light. The work concludes with a bibliography of no fewer than twenty pages.