

Book Reviews

Fishes of the Pacific Coast of Canada. Wilbert A. Clemens and G. van Wilby. (Bull. LXVIII.) Ottawa: Fisheries Research Board, 1946. Pp. 368. (Illustrated.) Paper, \$1.50; cloth, \$2.00.

For most of the seas of the world there are no comprehensive books on fishes which are useful to both ichthyologists and nonspecialists. The present volume fills that need for one large ocean area. Every species of fish which has been reported from the west coast of Canada is included. The fish fauna of the Northeast Pacific is so homogeneous, however, that the book will be most useful to anyone interested in the fishes which occur between Monterey Bay, California, and the Aleutian Islands, Alaska.

Identification keys for all of the species are included. There is a well-done, full-length illustration of each kind of fish, newly prepared by F. L. Beebe. Each species is adequately described in the text, and such information as is available about its life history and habits is briefly noted. There is an extensive glossary of the descriptive terms used, which will be useful to nonspecialists who are consulting other fish books. A bibliography of scientific papers on British Columbia fishes is given, followed by a list of general reference books on fish.

The work presented in the book is based on years of field experience with the forms described and is of high quality from an ichthyological standpoint. The system of classification adopted is modern, but on the conservative side and with little attention paid to taxonomic categories below the species level.

W. M. CHAPMAN

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What is psychology? Werner Wolff. New York: Grune & Stratton, 1947. Pp. xii + 410. (Illustrated.) \$4.00.

Although the chapter headings in this book are similar to those found in most general psychology texts, the topics discussed and the data presented are evaluated from the "organismic" point of view which "... considers man's behavior not as a fixed arrangement but as a dynamic system; the total behavior is more than the sum of its parts, a directing center being the resultant of functional relationships." In view of the author's theoretical bias it is not surprising that the researches presented in greatest detail are those done in his laboratory as well as in those of other gestaltists. One may wonder if the first-year student reading this book will come away with the impression that the problems with which gestaltists concern themselves are peculiar to that approach alone.

If, as the author states, the aim of this book is to make the student aware of the need for a questioning attitude, might it not be advisable to start with a study of the way in which we use words in questioning, formulating, and analyzing a statement? For example, in his discussion of perception Wolff says: "How can we unite the opposite theses that things actually are as they basically look to us, and that things are not as they

look but reflect our imagination?" The reviewer is puzzled by what Wolff means by "actually," "basically," "reflect," etc. Are we referring to the same phenomena when we use the same words? It should be noted that neglect of the study of the function of language is a characteristic of practically all psychology texts.

The chapters on Depth Psychology and Personality present the data in these areas in a more rounded fashion than do most psychology texts; however, devoting two and a half pages to "techniques and aims of Depth Psychology" is likely to give a distorted picture.

The first-year student will probably find this book interesting and stimulating. Representing as it does a particular theoretical orientation in psychology, it should be used in conjunction with other texts with different approaches.

SEYMOUR B. SARASON

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Guide to the literature of mathematics and physics including related works in engineering science. Nathan Grier Parke, III. New York-London: McGraw-Hill, 1947. Pp. xv + 205. \$5.00.

Despite the fact that mathematics, physics, and their applications in engineering are among the oldest of the sciences, their voluminous literature has been, and still is, difficult to get at. The student of these sciences, beginner and specialist alike, and the librarian who, except in rare cases, is not acquainted with these subjects have long needed a guide to publications in these fields. This need has now been admirably met by Nathan Grier Parke, III, of the Massachusetts Institute of Technology. As a matter of fact, useful as this work will be to the expert, it will prove a real boon to that fast-growing army of workers in other sciences who must use mathematics and physics as tools in their own work.

The book begins with a chapter on the principles of reading and study which is followed by chapters on self-directed education, how to conduct a literature search, and how to use periodicals. The directions given are clear and concise, and the reviewer feels that, based upon his experience in the Reference Department of the world's greatest library, even specialists in the physical sciences will profit from reading the first half of Prof. Parke's guide.

In the second half of his book, roughly more than half the volume, the author presents a list of some 1,800 works in mathematics, physics, and related subjects representing, in fact, a carefully selected library in these subjects. Indeed, about half the titles are represented in Dr. Parke's personal library, while the rest were selected from a study of review journals and catalogues and by checking the reference shelves of such collections as those at Johns Hopkins, M.I.T., and the Library of Congress. Not only standard works in English, but also many in French, Italian, and German are listed.

Preceding the list of titles is a classification of the subject matter of the text. The references, however, are arranged under

an alphabetical list of subject headings which, while it does permit of indefinite expansion, does not bring all relevant material together. In fact, it is not quite clear why Dr. Parke, having constructed a classification, did not use it, simply adding an alphabetic relative index as a key. Access to the titles by author is provided through an author index.

The book on the whole is well produced although the use of lower-case type for the subject headings is somewhat annoying.

As a librarian I am grateful to Dr. Parke for his valuable guide. I believe that all who use his book will express a similar sentiment.

MORRIS C. LEIKIND

Library of Congress, Washington, D. C.

Dynamic aspects of biochemistry. Ernest Baldwin. New York: Macmillan; Cambridge, Engl.: at the Univ. Press, 1947. Pp. xviii + 457. \$4.00.

The author has devoted this text to enzymes (5 chapters) and metabolism (11 chapters).

The chapters on enzymes cover this field very well. Groups of enzymes are discussed which usually receive little attention. One could wish that the author had summarized all the chapters as was done in the case of the first two.

In the chapters on metabolism, the role of individual amino acids is featured. In the opinion of the author the end-product of nitrogenous metabolism is based on the availability of water to the organism. Emphasis is placed on adenosine triphosphate as the only source of energy that can be directly utilized by living organisms.

The close resemblance of the carbohydrate metabolism of yeast and muscle is discussed.

The author has accepted as fact that virus proteins can "reproduce." So far as one of these proteins is concerned, it has been shown that it can be "sterilized" by appropriate means without loss of any of its physicochemical properties.

The text is well written, in simple, clear language and should be a requirement for every graduate student in the field of biological chemistry.

WILLIAM H. WELKER

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Scientific Book Register

CHRYSLER, M. A., and EDWARDS, J. W. *The ferns of New Jersey*. New Brunswick, N. J.: Rutgers Univ. Press, 1947. Pp. vii + 201. (Illustrated.) \$4.00.

COPELAND, EDWIN BINGHAM. *General Filicum; the genera of ferns*. (*Annales Cryptogamici et Phytopathologici*, Vol. 5, Frans Verdoorn, Ed.) Waltham, Mass.: Chronica Botanica; New York: Stechert-Hafner, 1947. Pp. xiv + 247. (Illustrated.) \$6.00.

DAVIES, OWEN L. (Ed.) *Statistical methods in research and production, with special reference to the chemical industry*. London-Edinburgh: Oliver and Boyd, 1947. Pp. xi + 292. 28/-.

DAVIS, HALLOWELL, et al. *Hearing aids: an experimental study of design objectives*. Cambridge, Mass.: Harvard Univ. Press, 1947. Pp. viii + 197.

GOLD, HARRY, et al. (Eds.) *Cornell conferences on therapy*. (Vol. II.) New York: Macmillan, 1947. Pp. xx + 354. \$3.75.

HOUGEN, OLAF A., and WATSON, KENNETH M. *Chemical process principles*. Pt. II: *Thermodynamics*. New York: John Wiley; London: Chapman & Hall, 1947. Pp. xlvii + 437-804. \$5.00.

HUTCHINSON, J. B., SILOW, R. A., and STEPHENS, S. G. *The evolution of Gossypium, and the differentiation of the cultivated cottons*. (Empire Cotton Growing Corp.) New York: Oxford Univ. Press, 1947. (Illustrated.) \$4.25.

JONES, BURTON W. *Elementary concepts of mathematics*. New York: Macmillan, 1947. Pp. xiii + 294. \$4.00.

KANEGIS, JAMES. *Chemical and technical stenography: technical Gregg stenography with special outlines and textual matter for the fields of chemistry and metallurgy*. Washington, D. C.: James Kanegis (P. O. Box 1121), 1947. Pp. viii + 387. \$5.00. (Lithoprinted.)

KELLEY, TRUMAN LEE. *Fundamentals of statistics*. Cambridge, Mass.: Harvard Univ. Press, 1947. Pp. xvi + 755. \$10.00.

LEE REUBEN. *Electronic transformers and circuits*. New York: John Wiley; London: Chapman & Hall, 1947. Pp. vii + 282. (Illustrated.) \$4.50.

LULL, RICHARD SWANN. *Organic evolution*. (Rev. ed.) New York: Macmillan, 1947. Pp. xx + 744. (Illustrated.) \$8.00.

LUNDBERG, WALTER O. *A survey of present knowledge, researches, and practices in the United States concerning the stabilization of fats*. (The Hormel Institute, Univ. Minnesota, Publ. 20.) Minneapolis: Univ. Minnesota, 1947. Pp. 45. Free upon request to the Hormel Institute, Austin, Minnesota.

NIETHAMMER, TH. *Die genauen Methoden der astronomisch-geographischen Ortsbestimmung*. Basel, Switzerland: Druck von E. Birkhäuser, 1947. Pp. 181.

RIDDLE, OSCAR. *Endocrines and constitution in doves and pigeons*. Washington, D. C.: Carnegie Institution of Washington, 1947. Pp. xi + 306. (Illustrated.) Paper, \$3.00; cloth, \$4.00.

ROSEN, EDWARD. *The naming of the telescope*. New York: Henry Schuman, 1947. Pp. xvi + 110. (Illustrated.) \$2.50.

SCHWARZKOPF, PAUL. *Powder metallurgy: its physics and production*. New York: Macmillan, 1947. Pp. xii + 379. (Illustrated.) \$8.00.

SHERMAN, HENRY C. *Calcium and phosphorus in foods and nutrition*. New York: Columbia Univ. Press, 1947. Pp. vi + 176. \$2.75.

SISAM, J. W. B. *The use of aerial survey in forestry and agriculture*. (Imperial Agricultural Bureau, Joint Publ. No. 9.) Oxford, Engl.: Imperial Forestry Bureau, 1947. Pp. 59 + 67 plates. 7s. 6d.

SKILLING, WILLIAM T., and RICHARDSON, ROBERT S. *Astronomy*. (2nd ed.) New York: Henry Holt, 1947. Pp. xi + 692. (Illustrated.) \$4.75.

WORMINGTON, H. M. *Prehistoric Indians of the Southwest*. Denver, Colo.: Colorado Museum of Natural History, 1947. Pp. 191. (Illustrated.) Paper, \$1.50; Cloth, \$2.50.