

chological rather than physical determinations. Excellent discussions of these various units are given.

The book transcends the chapters in textbooks of physiology which describe sensory phenomena. It is at once more authoritative than they and more cautious. It avoids the dogmatism so prevalent in the texts, warning against the uncritical tendency to accept early hypotheses and tentative theories as established facts. It repeatedly indicates the direction which research should follow to achieve fuller truth. Even the most serious passages may include a flash of wit or some apt allusion to human experience which helps carry the reader through to the end of the argument.

This volume is probably too serious and too scientific a study to attract the general public, although it could be read with profit by any educated layman. It should be read by every graduate student in the biological and medical fields. Teachers in physiology and psychology will discover here a mine of information from which to draw material for lectures. Research workers will find in it a stimulus to further theory and experimentation.

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Starch: Its Sources, Production and Uses. Charles Andrew Brautlecht. New York: Reinhold, 1953. 408 pp. Illus. \$10.00.

Numerous inaccuracies detract seriously from what otherwise might have been a very useful book on the starch industry. Twelve inaccuracies were counted on the first three pages of Chapter I and eight were counted on the first page of Chapter II. Three examples of errors are: on page one "Monosaccharides are simple sugars with six carbon atoms . . ." is an inaccurate definition as are the definitions of di- and trisaccharides; on page 189 it is stated that "16 to 20 per cent" sulfuric acid is used in corn steeping; on page 207 the figure identified as "Waxy maize factory" is a portion of the sorghum mill at Corpus Christi. Chapter XXI by O. A. Moe contains inaccuracies in structural formulas either from omission of hydrogen atoms or from a stereo-arrangement of carbon atoms. The nomenclature is not that commonly employed today. On page 358, the list of important polysaccharides includes mannans and glucomannans of doubtful importance and omits many generally considered important. The structural formula for guar was not properly accredited to the first publisher of structural data.

The portion of the book dealing with the potato starch industry, a total of 163 pages, is very well written and valuable. Here one will find extensive information on the history and development of the potato starch industry, the agricultural production of potatoes, their grading, handling, composition, and analysis. An excellent and authoritative chapter deals with the manufacture of potato starch. Two of the chapters deal with the sweet potato industry. In the

reviewer's opinion this section on the potato industry is valuable and is recommended to those persons interested in this area.

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Psychiatric Dictionary. With encyclopedic treatment of modern terms. 2nd ed. Leland E. Hinsie and Jacob Shatzky. New York: Oxford Univ. Press, 1953. 781 pp. \$15.00.

Psychiatry, perhaps more than any other medical specialty, has developed a highly complicated technical language of its own. New words are constantly added, definitions are vague and at times strictly personal, and a term may be used with different meaning at different times, thus compounding the confusion. An accurate, authoritative, up-to-date psychiatric dictionary is a great need. The first edition of this dictionary came close to filling this need. Unfortunately, the second edition, if such it can be called, falls far short of such attainment.

Actually, this new edition is a reprint of the first edition as Part I, with a supplement of new words as Part II. In this arrangement lies the work's fatal weakness. From the standpoint of convenience alone, the format is poor. The supplement is approximately half the size of Part I. In effect, this means that one must consult two dictionaries on each word being searched. Economically, many purchasers would have saved money by simply purchasing the supplement separately, since there is no revision of Part I.

These discrepancies, however, are of minor importance compared with the basic fault arising from this method of revision. The primary part of the dictionary is reprinted exactly as in the first edition (1940). This means that many of the changes of the past 13 years have not been incorporated in this "new" edition. Ordinary dictionaries remain relatively static; this cannot be so of a dictionary which covers the lexicon of a science changing as rapidly as psychiatry. The 13-year period overlooked by the authors included a three-year period of partial military mobilization as well as a world war, the latter event being renowned for, among other things, the manner in which it altered psychiatric concepts. Of even more significance, from a lexicographer's point of view, there has been a sweeping revision of the official nomenclature of psychiatric disorders, a revision which has the official support of the American Psychiatric Association, and which has become the psychiatric nomenclature of the American Medical Association's Standard Nomenclature. This item, of no mean significance, has been completely overlooked by the authors.

These oversights seriously impair the usefulness of the dictionary, rendering it not only incomplete, but actually inaccurate. When one seeks a definition of "combat exhaustion," "combat fatigue," or similar terms, one finds them listed in Part II without definition, and with a simple referral to the term "shell-shock" in Part I. In Part I there is given an explana-

tion of "shell-shock" taken from a 1936 publication. Thus evaporates the collected clinical experience of literally thousands of psychiatrists, including some of the most prominent in the field, over seven years of mobilization and combat; the searcher, seeking the definition of a term used perhaps more commonly than any other in the past 10 years, is presented with an explanation written 17 years ago, based on the clinical experience of World War I. This is typical of the omissions throughout the revision.

The revised psychiatric nomenclature was published in early 1952, and has now found its way into at least one standard textbook of psychiatry. Nonetheless, this dictionary, published in 1953, contains not a single one of the new terms. "Acute Brain Syndrome" and "Chronic Brain Syndrome" are nowhere to be found; posttraumatic personality disorder is said to be a "psychosis" as listed in the 1935 nomenclature; and so on. This leads the authors into a ludicrous position from time to time, as when, commenting on the term, "sociopath," they state, "The term has not achieved any considerable degree of acceptance." To the con-

trary, we find the term, "sociopathic personality disturbance" one of the class headings in the Standard Nomenclature. Such inaccuracies are manifold.

Despite these gross defects, the dictionary does have an area of usefulness, provided its limitations are recognized. The authors apparently have devoted themselves assiduously to the literature of psychoanalysis, perhaps to the neglect of the other areas of psychiatry. As a result, the work provides an up-to-date, accurate compilation of psychoanalytic terms, and might very well have been titled "Psychoanalytic Dictionary." In other areas which have been relatively unchanging since 1940, such as the field of psychobiology, the dictionary does a creditable job.

In summary, it may be said that this is an excellent dictionary of psychoanalysis and its allied movements, a good dictionary of psychobiology, and an extraordinarily unreliable reference work in general and clinical psychiatry.

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Scientific Book Register

Adventures in Physiology: A Selection of Scientific Papers. With excursions into autopharmacology. Henry Hallett Dale. London: Pergamon Press. (U.S. distrib.: Macmillan, New York.) 652 pp. Illus. \$19.50.

Gmelins Handbuch der Anorganischen Chemie: Schwefel (Sulfur), System No. 9. 8th ed. Edited by Gmelin Institute. Weinheim/Bergstrasse, West Germany: Verlag Chemie, GmbH, 1952-53. Section A-2. 450 pp. Illus. \$35.30. Section B-1. 372 pp. Illus. \$29.40 (U.S. distrib.: Walter J. Johnson, 125 E. 23rd St., New York 3; and Stechert-Hafner, 31 E. 10th St., New York 3.)

Thorstein Veblen: A Critical Interpretation. David Riesman. New York-London: Scribner's, 1953. 221 pp. \$3.00.

Machines that Built America. Roger Burlingame. New York: Harcourt, Brace, 1953. 214 pp. \$3.50.

American Constitutional Custom. A forgotten factor in the founding. Burleigh Cushing Rodick. New York: Philosophical Library, 1953. 244 pp. \$4.75.

Elements of Chordate Anatomy. Charles K. Weichert. New York-London: McGraw-Hill, 1953. 451 pp. Illus. \$5.50.

Recent Progress in Hormone Research. Vol. VIII. Proceedings of the Laurentian Hormone Conference. Gregory Pincus, Ed. New York: Academic Press, 1953. 603 pp. Illus. \$10.80.

Microwave Spectroscopy. Walter Gordy, William V. Smith, and Ralph F. Trambarulo. New York: Wiley; London: Chapman & Hall, 1953. 466 pp. Illus. \$8.00.

The Way of the World. The Rushton Lectures for 1952. (Geography). George H. T. Kimble. New York: George Grady Press, 1953. 123 pp. \$2.50.

Squaring the Circle and Other Monographs. Reissue. E. W. Hobson et al. New York: Chelsea, 1953. 361 pp. Illus. \$3.25.

Dispersal in Fungi. C. T. Ingold. New York: Oxford Univ. Press, 1953. 197 pp. Illus. + plates. \$3.50.

Climate, Vegetation & Man. Leonard Hadlow. New York: Philosophical Library, 1953. 288 pp. Illus. \$4.75.

Physical Constants of Hydrocarbons. Vol. V. Paraffins, olefins, acetylenes, and other aliphatic hydrocarbons. American Chemical Society Monograph Series #78. Gustav Egloff. New York: Reinhold, 1953. 524 pp. \$20.00.

A Free Society: An Evaluation of Contemporary Democracy. Mark M. Heald. New York: Philosophical Library, 1953. 546 pp. \$4.75.

Measurement Techniques in Mechanical Engineering. R. J. Sweeney. New York: Wiley; London: Chapman & Hall, 1953. 309 pp. Illus. \$5.50.

A Survey of Modern Algebra. Rev. ed. Garrett Birkhoff and Saunders Mac Lane. New York: Macmillan, 1953. 472 pp. Illus. \$6.50.

Introduction to Geometrical and Physical Optics. Joseph Morgan. New York-London: McGraw-Hill, 1953. 450 pp. Illus. \$6.50.

Social Behaviour in Animals: With Special Reference to Vertebrates. N. Tinbergen. London: Methuen; New York: Wiley, 1953. 150 pp. Illus. + plates. \$2.50.

Design of Machine Elements. 2nd ed. M. F. Spotts. New York: Prentice-Hall, 1953. 504 pp. Illus. \$7.25.

Science in Synthesis. A dialectical approach to the integration of the physical and natural sciences. William H. Kane, et al. River Forest, Ill.: Dominican College of St. Thomas Aquinas, 1953. 289 pp. \$3.50.

Low Temperature Physics. Charles F. Squire. New York-London: McGraw-Hill, 1953. 244 pp. Illus. \$6.50.

Elements of Electricity. 4th ed. William H. Timbie and Alexander Kusko. New York: Wiley; London: Chapman & Hall, 1953. 631 pp. Illus. \$5.50.

Fundamentals of Physical Science. An introduction to the physical sciences. 3rd ed. Konrad Bates Krauskopf. New York-London: McGraw-Hill, 1953. 694 pp. Illus. + plates. \$6.00.