

more than one place. But the author has spared no effort to maintain the student's interest.

The book is marred by a number of minor errors and defects which should not have been permitted to occur. For example, Fig. 3.6 employs the poor choice of notation, α for altitude and λ for latitude, and then mislabels the complement of α for α . Fig. 16.9 illustrates the diameter of Mars and the orbits of its satellites to scale, but the text states, "diameter of the orbit of Mars." On page 306 the expression for the Fitzgerald contraction contains a + sign instead of a - sign under the radical. On the date of the Siberian meteor shower of 1908, the earth is said to be within 0.03 a.u. of the comet, instead of the orbit of the comet. Such blunders are confusing to the beginning student, who has not yet enough background to be discerning.

No mention is made of the splendid pioneering meteor researches of Whipple, but the work is attributed to "the Blue Hills Meteorological Observatory (connected with Harvard University)." On page 233 there is a confused statement concerning the "Trogan Group." Adonis is omitted from the list of minor planets approaching very close to the earth. The brilliant success of Struve and his associates in explaining the observed phenomena of β Lyrae is not even mentioned.

The reviewer would make one other criticism of a general nature. The number of pages allotted to each of the various topics from classical Newtonian gravitational astronomy down to the most recent astrophysical developments is apportioned so as to give a prospectus of the whole field of astronomy that was valid about a quarter of a century ago. It is high time for a textbook of this kind to appear which presents the current status of astronomy in its true light, with the theoretical developments and interpretations of observations during the last three decades about on a par with that of the preceding three centuries.

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Synthetische Methoden der organischen Chemie. (Vol. II.)

W. Theilheimer. Basel, Switzerland: S. Karger, 1948. Pp. viii + 309. Sfr. 35.

Volume 2 of *Synthetische Methoden* follows the plan of the first volume. It presents brief directions for organic syntheses and degradations arranged in an original, formal system wherein reactions are grouped according to the new bonds that are formed and with no consideration of the mechanism or intermediate stages involved. The literature of 1945-46 is covered with the exception of American periodicals, which will be taken up in a forthcoming issue.

Any discussion of Theilheimer inevitably brings up the merits of the coded arrangement. In the opinion of the reviewer, it is simple, reasonable, and well worth the short time necessary to master it. For example, if one should wish to find information on the amination of a pyridine nucleus, through the code he could find it in a moment

under the entry NC $\uparrow\uparrow$ H, which groups those reactions in which a carbon-nitrogen bond is formed by replacement of hydrogen. Consultation of the generous alphabetical index, on the other hand, reveals a profusion of references under "amines" and "amino-," not one of which leads immediately to the right reference. Furthermore, it cannot be located as a named reaction unless one recalls that the eponymic *Chichibabin* appears in a German index under the T's. The code, however, is not infallible, for placements are occasionally arbitrary, and it is fair to say that the alphabetical index will suffice in a large proportion of cases.

This book has a place in the library of the organic chemist who is concerned mainly with synthesis. In addition to classical material, it contains a wealth of reactions developed primarily in the steroid and carbohydrate fields and hence not generally familiar. Derivatives for characterization are included in their proper places according to the reactions by which they are formed.

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Scientific Book Register

DENNIS, WAYNE. (Ed.) *Readings in the history of psychology.* New York: Appleton-Century-Crofts, 1948. Pp. xi + 587. \$4.75.

DUKES, H. H. *The physiology of domestic animals.* (6th ed.) Ithaca, N. Y.: Comstock Publishing, 1947. Pp. xii + 817. (Illustrated.) \$7.00.

HILDITCH, T. P. *The chemical constitution of natural fats.* (2nd ed., rev.) New York: John Wiley, 1947. Pp. xiii + 554. \$9.00.

LAWRENCE, JOHN H., and HAMILTON, J. G. (Eds.) *Advances in biological and medical physics.* (Vol. I.) New York: Academic Press, 1948. Pp. xi + 484. \$8.60.

MCCOY, NEAL H. *Rings and ideals.* (Carus Mathematical Monographs of Mathematical Association of America, No. 8.) LaSalle, Ill.: Open Court Publishing Co., 1948. Pp. xii + 216. \$2.00.

TURNER, C. DONNELL. *General endocrinology.* Philadelphia-London: W. B. Saunders, 1948. Pp. xii + 604. (Illustrated.) \$6.75.

VAUGHAN, WARREN T. (rev. by J. Harvey Black). *Practice of allergy.* (2nd ed.) St. Louis, Mo.: C. V. Mosby, 1948. Pp. xx + 1132. (Illustrated.) \$15.00.

WATERS, W. A. *The chemistry of free radicals.* (2nd ed.) New York: Oxford Univ. Press; Oxford, Engl.: Clarendon Press, 1948. Pp. viii + 295. \$6.50.

———. *Industrial electronics reference book.* (Contributions of Electronics Engineers of the Westinghouse Electric Corp.) New York: John Wiley; London: Chapman & Hall, 1948. Pp. x + 680. (Illustrated.) \$7.50.