Book Reviews

Handbook of Turtles: The Turtles of the United States, Canada, and Baja California. Archie Carr. Ithaca, N. Y.: Comstock Pub., Cornell Univ. Press, 1952. 542 pp. $7.50.

This is another of the excellent *Handbooks of American Natural History* which are gradually furnishing reliable reference material to the animals of our continent. Carr deals with 79 species and subspecies in a faunal area that avoids tropical types in other parts of Mexico and southward. After a 46-page introduction, dealing with general problems of turtle respiration, reproduction, growth, adaptations, behavior, and mythology, comes the meat of the book—the detailed account of each species and subspecies. Maps indicate the range. Photographs and drawings emphasize description of each kind. Notes on habits, breeding, and economic importance often afford Carr opportunity for entertaining comment. Conservation is called for on frequent occasions. "There exists a curious lot of witless or psychopathic characters who love to run over the box turtles on the roads to hear them pop, and there is probably nothing much that can be done about these people except to hope they skid."

The 68-page bibliography, the references to turtle literature on a state-by-state basis, and the careful index, will be highly useful features of the book. Those with appreciation for keys to species will be happy to see that Carr's keys are numbered for use in either direction—forward to species, or backward to differences.

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Chemistry of Carbon Compounds: Aliphatic Compounds, Vol. I, Pt. A. E. H. Rodd, Ed. Amsterdam–Houston: Elsevier, 1951. 777 pp. $20.70; by subscription, $18.00.

One's first impression is that a group of first-rate British chemists have set out to make good their subtitle "A modern comprehensive treatise." This is more than confirmed by closer scrutiny. Dr. Rodd was for years the liaison officer between the Dyestuffs Division of I.C.I. and the British universities. His advisers, Cook, Haworth, Heilbron, Hirst, Robinson, and Todd, represent the finest organic chemical minds in Great Britain.

It is inevitable that this reference work will be compared to other widely used treatises on organic chemistry, such as those by Karrer, Fieser, Whitmore, Richter, and Gilman. Of these, the present work most resembles Richter but differs from it in being much more modern and more comprehensive. The degree to which the recent literature is incorporated is remarkable and gives great value to Rodd's treatise. The books by Whitmore and Karrer are more elementary than Richter and serve as textbooks, whereas this treatise is far too voluminous for this purpose.

As compared to Gilman's *Comprehensive Treatise*, there is a fundamental difference in approach. Except for the first 195 pages, which are concerned with general and historical topics, the arrangement is by classes and, within classes, by compounds, much in the style of Beilstein and Elsevier, which are, of course, still more voluminous and detailed. Gilman is arranged by topics such as "Unsaturation and Conjugation" with illustrations from the whole domain of organic chemistry.

This reviewer has long been impressed with the importance of more than one type of arrangement of scientific facts. All sorts of scientific and industrial progress are dependent upon viewing two or more new or old facts in a new relationship. This is equally true of a simple invention and of a fundamental advance in scientific theory. Dr. Rodd's "modern comprehensive treatise" is therefore welcomed as the successor to Richter and a work which should stand beside Gilman in the library of every serious organic chemist.

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The Theory of Atomic Spectra. Reissue. E. U. Condon and G. H. Shortley. New York: Cambridge Univ. Press, 1951. 441 pp. $11.00.

The present publication is essentially a reprint of the first edition, published in 1935. At that time, this book was the first complete theoretical treatment of atomic spectra based upon quantum mechanical principles. It has remained the only one and has served half a generation of atomic physicists as an indispensable source of information and as a guide in further detailed research.

It is regrettable that the authors were prevented by other duties from preparing a thoroughly revised and extended edition, but many physicists—and especially the younger generation—will welcome the decision of the authors and publishers to meet the great demand for this outstanding work by at least a revised reissue.

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The World of Learning 1952. 4th ed. London: Europa Pub., 1952. 952 pp. $14.00.

The World of Learning 1952 is an invaluable book of reference, well worth the price of $14.00 for this purpose alone. It is, however, one of those insidious books that will start its owner on diverse paths of investigation and make him reluctant to lay the volume down.

Presenting in a straightforward way the essential facts about the learned societies, research institutions,