BOOK REVIEWS

REED, ALBERT A. *Radio Education Pioneering in the Mid-West.* Boston: Meador Publishing Company, 1943. 128 p. $2.00.

The author is Director-Emeritus of the University of Nebraska Extension Division, and has had a "grand-stand" seat in observing the use of the radio as an educational tool in his own and the neighboring states of Iowa, Kansas, Minnesota, Missouri, North Dakota and South Dakota. Experiences in radio education in these states are described in this treatise.

—C.M.P.

NEVIN, CHARLES M. *Principles of Structural Geology.* New York: John Wiley and Sons, Inc., 1942. 320 p. $3.50.

This textbook is especially outstanding for its numerous, splendid illustrations, and pertinent photographs. These add greatly to the understanding of the textual material which is well-selected. Geography teachers interested in elements of geography and physical geography will find this one of the best books available on structural geology.

—C.M.P.

ROBESON, FRANK L. *Physics.* New York: The Macmillan Company, 1942. 819 p. $4.50.

In this text the author sets up for himself the ambitious ideal that "it should be possible to have a textbook in physics in which the subject matter was presented in such a clear and orderly fashion that it would not be necessary for the teacher to explain the text, and that in consequence his time in the classroom could be devoted to demonstrations, discussions, and the solution of problems. The present volume is an attempt to achieve that ideal." The reviewer seriously doubts that even this good book can attain that ideal in the usual college physics course. Certainly the author has strived to present his subject matter most clearly, but a knowledge of elementary college mathematics is assumed. Unless the students are unusually good or have a fairly good mathematical background much explanation will be necessary for the classes using this book. The author is Professor of Physics at Virginia Polytechnic Institute.

—C.M.P.

POLLARD, ERNEST, AND DAVIDSON, WILLIAM L., JR. *Applied Nuclear Physics.* New York: John Wiley and Sons, Inc., 1942. 249 p. $3.00.

Few, if any, subjects in science have been studied with more sustained interest than the transmutation of the elements. Although the goal of the alchemists, it was not until Lord Rutherford's experiments two decades ago that success was attained. Transmutation is essentially linked with the atomic nucleus. The discovery of artificial radioactivity has placed in the hands of chemists, biologists and medical research workers the means of studying "tagged" atoms, which renders possible experiments that could not have been contemplated a short time ago.

The technical aspects rather than the theoretical are emphasized in this book. The essential facts and methods of artificial radioactivity and transmutation are presented. This treatise would serve admirably for a text in a course in atomic structure, or as an excellent reference for persons desiring accurate information on nuclear transmutation.

—C.M.P.

WYLIE, C. C. *Astronomy, Maps, and Weather.* New York: Harper and Brothers, 1942. 449 p. $3.00.

This book with novel title is intended for the pre-aviation training course. It has a dual purpose—to present certain fundamental principles in certain fields of science and to provide basic information for specific applications. The volume consists of four rather distinct parts. The first six chapters are devoted to discussions of the celestial sphere, the constellations, telescopes, and the earth; the second part, consisting of four chapters, discusses weather and weather forecasting; the third part consists of three chapters on maps, time and celestial navigation; and the final eight chapters are on astronomy.

Altogether Dr. Wylie has presented a most readable and excellent text. Especially are the parts on astronomy unusually good. Few if any other authors have done a better job. The treatment on weather is excellent but brief. It would seem desirable to supplement greatly the weather material here presented if one were teaching a course in pre-aviation training.

This would be an excellent text for the astronomy and weather phases of physical science survey courses. High school science teachers and lay readers will find this an excellent treatise on astronomy and weather.

—C.M.P.

DUNCAN, JOHN CHARLES. *Essentials of Astronomy.* New York: Harper and Brothers, 1942. 181 p. $1.85.

Essentials of Astronomy is a simple and non-technical presentation of the fundamentals of astronomy. There are chapters on: (1) "The Appearance of the Sky," (2) "Appearances Interpreted," (3) "Gravitation," (4) "Light," (5) "The Sun's Attendants," (6) "The Structure and Action in the Universe," (7) "The Sun and Other Stars." There are eight pages of star maps and nearly one hundred illustrations.

Altogether this is a quite readable treatise and would serve excellently as the astronomy reference in a survey course in physical science.

—C.M.P.