Mendel himself. The progenies of different hybrid plants varied even in Mendel's experiments much beyond the ratio 3:1. Thus, in the offspring of one plant there were 19 yellow and 20 green seeds, and of another plant only a single green for 30 yellow ones'' (p. 55).

Lysenko's ideas on reproduction and development derive, as did those of Darwin and Spencer and Michurin, not from experimentally ascertained facts but from the need for a mechanism by which another supposed fact, the inheritance of acquired characters, may be explained. The need for such a mechanism disappeared with the failure of proof of the inheritance of acquired characters. No new proofs are given in this book.

It has been apparent for a long time that Mendelian heredity, as the orderly transmission of relatively stable units (genes) and the inheritance of direct effects of the environment or of training and similar modifications could not both be true. Lysenko clearly believes the evidence for the latter to be more convincing than that for Mendelian heredity. While that view was possible in the Nineteenth Century and to those who ignore the modern facts of heredity, it is strange to encounter so crude a restatement of it in a country where such striking progress in genetics was made as in the USSR between 1920 and 1940. It seems an anachronism somewhat like the denial of the facts of evolution over large areas of a country as progressive as the USA. In both cases the causes of such attitudes seem to those outside the country to be obscure and puzzling. In both cases also the scientific position of the country is so strong that the heterodox views of small minority groups may safely be left to the judgment of time and progress.

Columbia University

L. C. DUNN

The fortress islands of the Pacific. William Herbert Hobbs. Ann Arbor: J. W. Edwards, 1945. Pp. xiii + 186. \$2.50.

This interesting little book is a welcome addition to the meager list of informational volumes on the Pacific. Considering its vast area, the Pacific was surprisingly little known at the beginning of the recent Japanese war. This was particularly true of the territory mandated to Japan. The Carolines, the Marshalls, and the Mariannas were then islands of mystery. Because of extended tours in 1921 and 1923, during which careful notes and maps were made, Professor Hobbs was probably the best-informed person in America on the geologic and geographic aspects of this section of the Pacific at the time of Pearl Harbor.

The book is well illustrated with numerous original maps, diagrams, and pen drawings. The author divides all Pacific Islands into two great groups, the "Arcuate Islands." and the "Strewn Islands." A more detailed classification, based largely on origin, results in the following types: group volcano islands, volcano islands, almost-atolls, atolls, part-raised atolls, raised atolls, newborn arcuate islands, and youthful arcuate islands. Each type forms the subject matter of a separate chapter in which well-chosen examples are used as illustrations. The chapter on the Origin of the Islands is not all which



The boisterous saga of America's oil pioneers...capturing the restless, enterprising spirit of the great figures of wildcatting — from Williams, Drake, and Galey to Joiner and Gutowsky and the excitement of life in the oil boom towns. A lively, informal history by a veteran operator and scout.



Illustrated with photographs.



might be desired. This is particularly true of the section dealing with the origin of the Strewn islands. The entire Pacific basin is described as an area of shrinking and sinking. Before the sinking began, huge volcances were built up at hundreds of points. During the subsequent subsidence the sea eventually occupied the region, and most of the ''volcances disappeared completely beneath the waves and their positions are indicated today by coral growths built up over them as upon a pedestal—the coral islands or atolls.'' Although the Darwinian theory of atoll formation lends itself nicely to what is required in a popular book of this type—a simple explanation of atoll formation—still, the facts produced by careful study of the islands demand a much more complex explanation of their origin than is outlined here.

A chapter on the military value of each island type is the unique contribution of the book. A well-chosen bibliography is appended. Professor Hobbs writes clearly and interestingly. Geologists should produce more books of this character instead of leaving it to those less qualified.

University of Rochester

J. EDWARD HOFFMEISTER

The Woods Hole Marine Biological Laboratory. Frank R. Lillie. Chicago: Univ. Chicago Press, 1944. Pp. x + 284. (Illustrated.) \$4.00.

Unique in the history of scientific enterprises in the United States is the Woods Hole Marine Biological Laboratory. It is unique in organization, history, and in the scope of its service both to the biological sciences and to the nation. It is national in its services, democratic in organization, and international in its relations. The Naples Biological Station had minimum support from the United States and Great Britain; but in control, staff, and clientele was always essentially German and in recent years has become Italian. It never had the support of France, Russia, or the other European states. The Woods Hole Laboratory, on the other hand, has had the loyal support of many of the leading American universities and colleges, especially of the Atlantic seaboard and Middle West. These were represented in its board of trustees, staff, and clientele. It is fortunate that the history of this institution has been written by one long connected with its operations and while the most of those who have shared in its development are still living.

This book is an important document in the history of the biological sciences on this continent. Its illustrations picture the faces of most of the teachers and investigators of these sciences in the United States during the flowering period of biology in America. Its one great defect is the absence of a suitable likeness of its distinguished author.

The influence of Louis Agassiz and his pupils is evident in the history of the Woods Hole Institution, which is the heir of the short-lived institution at Penikese. Even more dominant in the heredity is the influence of the rapidly growing interest in animal morphology and embryology which stemmed from the laboratories of Leuckart and Balfour and soon burgeoned from the newly established chairs in our universities as natural history gave way to the newer specialties.

One chapter is devoted to the later-established sister institution, the Woods Hole Oceanographic Institution. One function of this marine laboratory has always been its class instruction which brought young biologists under the potent influence of the leaders in the American biological sciences under circumstances which inspire both effort and enthusiasm. The effect of this function upon the expansion and quality of American teaching and research is imponderable but potent.

CHARLES A. KOFOID

University of California, Berkeley

Scientific Book Register

- BEST, CHARLES HERBERT, and TAYLOR, NORMAN BURKE. The physiological basis of medical practice: a University of Toronto text in applied physiology. (4th ed.). Baltimore: Williams and Wilkins, 1945. Pp. xiii + 1169. (Illustrated.) \$10.00.
- Collingwood, R. G. The idea of nature. New York: Oxford, 1945. Pp. 192. \$4.00.
- FITCH, LYLE, and TAYLOR, HORACE. (Eds.) Planning for jobs: proposals submitted in the Pabst postwar employment awards. Philadelphia: Blakiston, 1946. Pp. xxii + 463. \$3.75.
- FULTON, JOHN F. (Ed.) Howell's textbook of physiology. (15th ed.) Philadelphia: W. B. Saunders, 1946. Pp. xxxv+1304. (Illustrated.) \$8.00.
- LUSH, JAV L. Animal breeding plans. (3rd ed.) Ames, Iowa: Collegiate Press, 1945. Pp. viii+443. (Illustrated.) \$3.00.
- MACGREGOR, GORDON. Warriors without weapons: a study of the society and personality development of the Pine Ridge Sioux. Chicago: Univ. Chicago Press, 1946. Pp. 228. (Illustrated.) \$3.75.
- MASSERMAN, JULES H. Principles of dynamic psychiatry: including an integrative approach to abnormal and clinical psychology. Philadelphia: W. B. Saunders, 1946. Pp. xix + 322. (Illustrated.) \$4.00.
- MERRITT, ARTHUR H. Peridontal diseases, and soft tissue lesions of the oral cavity. (3rd ed.) New York: Macmillan, 1945. Pp. 276. (Illustrated.) \$3.50.
- POSNANSKY, ARTHUR. Tihuanacu: the cradle of American man. New York: J. J. Augustin, 1945. Vol. I: Pp. viii + 158; Vol. II: Pp. viii + 246. (Illustrated.) \$30.00.
- RICHTER, KENNETH M. A work-text on human embryology. St. Louis: John S. Swift, 1945. Pp. 178. (Illustrated.) \$3.75.
- TURNER, RUFUS P. *Radio test instruments*. Chicago-New York: Ziff-Davis, 1945. Pp. xiii+219. (Illustrated.) \$4.50.