ber 1 of the National Audubon Society, New York. 111 pp. 20 plates. 22 figures. 1942. $2.50.

We find here an interesting account of the ecology and natural history of a bird threatened with extinction. It is by a graduate student and represents an effort to devise means for the preservation of the species. It is very full and detailed and ends with a series of recommendations to improve the conditions under which the bird will have to live.

The Oceanic Tintinnoina of the Plankton Gathered during the Last Cruise of the Carnegie. By ARTHUR SHAKLETON CAMPBELL. Carnegie Institution of Washington Publication 537. 163 pp. 128 figures. 1942. $1.50.

This is an extended account of a group of ciliate Protozoa, including discussions of 13 subfamilies, 44 genera and 311 species. Of these there are 3 new subfamilies, 2 new genera and 14 new species. They were collected at 160 stations on the Pacific and Atlantic Oceans. Four general regions are recognized.

The Heterodontid Sharks: Their Natural History and the External Development of Heterodontis japonicus Based on Notes and Drawings by Bashford Dean. By BERTRAM G. SMITH. The Bashford Dean Memorial Volume Archaic Fishes. New York. 649–770 pp. 7 plates. 70 text figures. 1942. $5.00.

In this volume is found some of the results reached by Dean in his studies of these fish. There is first a comparison of the various species, followed by an account of habits and development. Only a small part of the work is by Dean. The drawings are attributed to him, although it is stated that some of them were done by Yatsu. While it is evidently desirable to retain Dean's connection with this work it is perhaps unfortunate that the material could not be treated unreservedly. Still, it is a useful piece of work well presented, and it is only to be regretted that Dean's original idea of comparison could not be fully carried out.

The Copepods of the Plankton Gathered during the Last Cruise of the Carnegie. By CHARLES B. WILSON. Carnegie Institution of Washington Publication 536. 237 pp. 1942. $2.50.

There are given here the results of an extensive series of collections, made at three levels of the ocean and at 162 stations. A long line of species is studied in their relation to temperature, salinity, hydrogen ion concentration and light. There is first listed the species at each individual station, followed by a detailed consideration of each species. From these we learn that the Pacific plankton is much the richer. Also that in distribution there is horizontally no uniformity and that vertically the species are stratified. According to temperature the concentration was greater at the lower, cooler levels. Salinity and hydrogen ion concentration have little effect on distribution of animals. On the other hand light is a direct cause of vertical stratification.

C. E. MCCLUNG

DEPARTMENT OF ZOOLOGY,
SWARTHMORE COLLEGE

CHEMICAL AND PHARMACEUTICAL COMPOUNDS

Preparacion de Productos Quimicos y Quimico-Farmaceuticos. By C. A. ROJAHN and F. GIRAL. 2 volumes. 1002 pp. Published by Editorial Atlante, Mexico, D. F., Mexico.

DR. C. A. ROJAHN, director of the School of Pharmacy and of the Institute of Food Chemistry in the University of Halle, had published in German reviews of pharmacy and pharmaceutical chemistry for some years a series of articles on the preparation of chemical and pharmaceutical compounds. These articles were completed and published in book form in 1937. Dr. F. Giral, a young Spanish professor of organic chemistry, now residing in Mexico, has translated the original German book into Spanish and increased its value by adding to it 120 compounds, among which are some war gases, lead tetraethylate, sulfanilamide and prontosil, ergosterine, nicotinic acid and digitoxin. The book describes the preparation of 718 compounds, of which 217 are inorganic and 501 organic. It includes the most important industrial and pharmaceutical chemicals and among them the most important aliphatic, aromatic, hydroaromatic, heterocyclic compounds, dyes, alkaloids and glycosides. The author gives for each compound the following details: formula and molecular weight, raw materials and equipment necessary for its preparation, method, chemical reactions involved, yield, properties, assay and bibliography. The methods of preparation are described in such a way that they can be very easily followed by the student. The style is certainly not meant for the highly specialized chemist.

The book is essentially practical and will be found useful by students of chemistry and pharmaceutical chemistry and by the pharmaceutical concerns of the Latin American countries.

RAFAEL MENDEZ

DEPARTMENT OF PHARMACOLOGY,
HARVARD MEDICAL SCHOOL