TABLE I

MEASUREMENTS IN CENTIMETERS AND LENGTH/WIDTH RATIOS OF OYSTERS FROM MATAGORDA BAY, TEXAS, COMPARED WITH DATA OF LUNZ[1]

Type of oyster	Number	Average length	Average width	L/W ratio
Small round	200	3.57	3.08	1.16
Market size round.....	112	9.48	7.58	1.25
Small coons	139	7.63	3.81	2.00
Market coons	153	11.74	5.07	2.32
South Carolina Oysters				
Selected shells, Indian shell heaps	10	16.61	6.50	2.56
Selected oysters, S. C. commercial beds..	140	9.93	4.90	2.03
Ordinary shells, Indian shell heaps	50	10.90	6.38	1.71
Ordinary oysters, S. C. commercial beds..	150	6.78	4.47	1.52

commercial beds. Oysters in the latter category averaged only 2.67 inches in length. The quality must have been poor, for minimum legal market size in most Southern states is 3 or 3½ inches.

Both sets of data show that the length/width ratio increases with size for both round and long oysters, but the increase is greater for the elongate type.

Coon oysters often grow in shallow water and are taken by hand so much that wading for oysters is known in some localities as cooning. This oyster was more easily obtained by the American Indian than the round oyster from deeper water. It seems plausible that small populations of Indians had the choice of larger oysters than those coming from intensively fished wild reefs of certain localities to-day. However, well-cultivated beds and some wild beds produce oysters comparable in size, although shorter in length, to any the Indian was able to obtain.

GORDON GUNTER

CRAWFORD PACKING COMPANY, INC.,
PALACIOS, TEXAS

THE FERMENTATION TEST FOR VITAMIN B_1

IN October of 1937 there appeared in SCIENCE a short note by R. J. Williams[1] on the use of yeast or other fungi for vitamin B_1 tests. In it Dr. Williams coupled our fermentation test[2, 3, 4] with Schopfer's growth test. Reference to the original note on our fermentation test[2] will show that the test is in no way related to growth and, in fact, test conditions tend to exclude growth of the yeast.

No attempt was made, at the time, to correct the impression created by Williams's note because it was thought that the reader would readily detect the error. However, in a recent book on vitamin B_1 by R. R. Williams and Spies[5] these authors have repeated the remarks referred to above.

It is to be hoped that by calling attention to the above inaccuracies in the literature, a more correct appraisal of the fermentation test will be made possible. This useful and rapid method for the determination of vitamin B_1 has been successfully employed in our laboratories for several years.

ALFRED S. SCHULTZ
LAWRENCE ATKIN
CHARLES N. FREY

THE FLEISCHMANN LABORATORIES,
STANDARD BRANDS, INC.,
NEW YORK, N. Y.

APPEAL FOR AID FROM CZECHO-SLOVAKIA

IN a letter of October 31 from Professor K. Absolon, curator of the Moravian Museum, Brno, Czecho-Slovakia, the writer appeals for aid with subscribers to the monthly *Příroda* (Nature), which as a result of the recent crisis has lost many local subscriptions and is thereby endangered in its existence. Professor Absolon asks that this matter be brought to the attention of the American libraries and establishments, as well as workers in natural history. The periodical in question has now reached thirty-one volumes. Its contents resemble those of *Popular Science Monthly,* with many original scientific reports and observations. All the original contributions, especially for the future, are and will continue to be provided with translations of their titles and text of illustrations, as well as with an adequate summary in English, French, German or Italian. The yearly subscription price of the periodical for America is $3.00.

A. HRDLIČKA

U. S. NATIONAL MUSEUM

SCIENTIFIC BOOKS

ANIMAL PARASITOLOGY

Traité de zoologie et de parasitologie médicale et vétérinaire. By M. NEVEU-LEMAIRE, professeur agrégé des facultés de médecine, Paris. Published by Vigot Frères, éditeurs.

IT is just fifty years since the appearance of the great treatises of Blanchard on human parasites and of Neumann and Railliet on those of domestic animals which gave to scientific students reference works of comprehensive character for the rapidly expanding

[1] R. J. Williams, SCIENCE, 86: 349, 1937.
[2] A. S. Schultz, L. Atkin and C. N. Frey, *Jour. Amer. Chem. Soc.,* 59: 948, 1937.
[3] *Ibid.,* 59: 2457, 1937.
[4] *Ibid.,* 60: 1514, 1938.
[5] R. R. Williams and T. D. Spies, "Vitamin B_1 and Its Use in Medicine," Macmillan, 1938.

field of animal parasitology. In this half century the knowledge of the structure and activities of these organisms and an understanding of their significance in human welfare have been largely increased by active students of the field. Many general publications covering various aspects of the subject have been contributed by workers in all countries, but it has been left for Neveu-Lemaire to solve the difficult problem of bringing together all the work accomplished and of including it without serious loss in a single treatise, which should give a successful picture of the entire field.

Of this monographic undertaking, which is to comprise three volumes—helminthology, entomology and protozoology—the first and second have already appeared and the third is approaching completion. The volume on helminthology contained 1,544 pages and was illustrated by 787 figures. The volume on entomology, which has just come from the press, has 1,376 pages and 597 figures. Both volumes are worked out on the same plan. The first section is devoted to a consideration of general topics in that field, starting with a historical sketch and including thereafter discussions of degree of parasitism, origin of the parasitic habit, details of life history and mode of attack as evolved by various types of parasites, responses of the host to parasitic invasion and other biological problems involved in the varying interrelations of the organisms.

The second section treats of the anatomical and taxonomic features of the various genera and species of the parasites of man and the domestic animals. The geographic distribution of these forms has been well worked out and emphasis laid on their pathogenic rôle in parasitic diseases which has been shown to be highly significant through the investigations especially of the last forty years. This section is well organized, complete and up-to-date, and naturally it occupies the major part of each volume. An extended discussion of hosts and the different taxonomic groups of free living animals which give shelter and sustenance to particular parasites brings together in lists, tables and condensed forms a mass of valuable material not otherwise easily available to students in parasitology.

The illustrations are reasonably numerous, in large part new, and so far as checked also rightly credited to their original sources. The volumes are well printed and provided with good indexes. As the result of detailed checking of the data given in various sections of these volumes, the reviewer has been impressed with the breadth and accuracy shown. This work justly ranks as the most comprehensive treatise of recent date in this field. Work done in all European and extra-European laboratories has been carefully brought together and due credit given to foreign authors, thus escaping the criticism of national overemphasis charged against some writers. The text manifests that clarity and effectiveness in style generally characteristic of French publications. The treatise is a most valuable addition to the literature of parasitology.

HENRY B. WARD

SOLAR RADIATION

Etude Practique des Rayonnements Solaire, Atmospherique et Terrestre (Methodes et Resultats). By CH. MAURAIN. Paris, 1937.

THIS is a very comprehensive summary of our present knowledge on the important subject of the character, the intensity and the duration of solar radiation. It covers 188 octavo pages, is divided into 14 chapters, contains 38 tables of data and is illustrated by 18 text figures.

The author points out the close relation between the intensity of solar radiation and related problems of interest to mankind, such as climatology, the thermodynamics of the atmosphere and forecasting the weather.

He also refers to the difficulties encountered in attempting to obtain measurements of the degree of accuracy necessary to obtain comparisons between the intensities of similar elements at different points on the surface of the earth, as is done in forecasting the weather. For example, in order to exclude all sky radiation from measurements of the intensity of direct solar radiation, it has been found necessary to cover the outer end of the long tube, or vestibule, of the pyrheliometer with a thin glass cover, which must be kept free from dust. A long vestibule requires a driving clock of considerable power and accuracy. It has been found that at Blue Hill, the ratio between the readings of the Smithsonian silver disk pyrheliometer and the Eppley pyrheliometer, which records automatically on a Wheatstone bridge, does not vary from 0.400 by more than ± 0.001, provided all adjustments are accurately made and maintained.

In Chapter V, Table V, are summarized monthly means of atmospheric transmission for stations varying in latitude from 2° south to 51° north, and from altitude 8 m to 3,492 m above sea level, for each season of the year. The greatest monthly variation is shown at Turin, 66 per cent. in September to 79 per cent. in February and April. The least variation is shown at Calama, Chile, from 79 per cent. in January to 84 per cent. in August and September. The latter location was selected by the Smithsonian Institution for one of its stations for determining the value of