

ing this volume, I often wished there was less reverence and veneration for what the West has contributed in the way of rigid schools of thought, and greater respect, by these workers, for their own individual abilities. These abilities might well be directed towards an international non-school-astic science, revolving around empirical descriptions, relative change, relative stability, and the influences of past civilizations and primitive man. In turn, Western thought in this field could not help but benefit.

FRANK E. EGLER

Norfolk, Connecticut

Oceanography. Invited lectures presented at the International Oceanographic Congress. AAAS Publication No. 67. Mary Sears, Ed. American Association for the Advancement of Science, Washington, D.C., 1961. xi + 654 pp. Illus. Cash price to members, \$12.50; others, \$14.75.

Nearly 1200 marine scientists from two thirds of the nations of the world met for 2 weeks (31 August to 12 September 1959) in the United Nations Building in New York. A selected few of these scientists presented the essence of their life's work to this learned audience in invited lectures. For each topic, part of the audience was competent and critical and the remainder was academically interested but not familiar with the detail or the background. The committee is to be congratulated on their selection of speakers. To a man, they proved themselves scholars, masters of their subjects, and excellent raconteurs. All this is reflected in the book.

Oceanography includes sections on the history of the oceans, populations of the sea, the deep sea, boundaries of the sea, and cycles of organic and inorganic substances in the oceans. Each section contains four to seven articles, each dealing with some aspect of physics, chemistry, or biology or their interrelations in the sea, the sea bottom, or the sea surface.

I am struck by the similarity of organization achieved between this volume and the *Discourses* of Machiavelli. In both, the authors explore factual situations, separate the local and fortuitous from the rules of general behavior, and point out successful and unsuccessful techniques. From

this background they define their goals and the possible approaches.

The book is a "sampler." It gives examples of successful marine research involving all academic disciplines. I doubt if even an avowed oceanographer will find every article to be of personal interest. On the other hand, any scientist, marine or otherwise, and in any field, will find one or more of the papers absorbing.

It is an outstanding reference book, at both the research and student levels. Each article includes the background, observation, reasoning, and conclusions to date on the topic. For the researcher the articles provide a most useful summary and a ready entry into the supporting scientific literature. Also, the discussions are mercifully condensed, clear, logical and readable. Much of the material can and should be used by university undergraduates, and even by high school students, as bases for term theses. In any case, the book should be required reading in science courses at the senior undergraduate level. Familiarity with living science, and with the research methods of the masters, is a part of education.

It is a book for the young scientist. I know of no other volume that so well defines oceanography, its purpose, opportunities, and requirements. Revelle, in his introduction, makes the point that oceanography is a field of research in which all disciplines of learning are combined. The volume demonstrates this by examples. It is evident that there is ample challenge in marine research for any good scientist.

JOHN P. TULLY

Pacific Oceanographic Group,
Fisheries Research Board of
Canada, Nanaimo, B.C., Canada

New Books

Biological and Medical Sciences

Advances in Carbohydrate Chemistry. vol. 15. Melville L. Wolfrom, Ed. Academic Press, New York, 1960. 457 pp. Illus. \$14.

Anatomy and Physiology. Diana Clifford Kimber, Carolyn E. Gray, and Caroline E. Stackpole. Lutie C. Leavell, Ed. Macmillan, New York, ed. 14, 1961. 789 pp. Illus.

Anthropology and Nutrition. vol. 2, *Records of the American-Australian Scientific Expedition to Arnhem Land.* Charles P. Mountford, Ed. Melbourne Univ. Press, Melbourne, Australia; Cambridge Univ. Press, New York, 1960. 527 pp. Illus. \$19.50.

A Bibliography of Eastern Asiatic Botany. Supplement 1, Egbert H. Walker. American Inst. of Biological Sciences, Washington 6, 1960. 612 pp. Individuals and industrial libraries, \$18.50; AIBS members, \$16.50. Covers the years 1937 to 1958. Subjects and area covered remain essentially the same as in the original work; Chinese botanical literature is least well covered. Indexes include subject (general and regional) and systematic.

The Biochemistry of Insects. Darcy Gilmour. Academic Press, New York, 1961. 355 pp. Illus. \$8.

Concepts of Medicine. A collection of essays on aspects of medicine. Brandon Lush, Ed. Pergamon, New York, 1961. 296 pp. \$8.50. Essays (26) reprinted from various sources.

Encyclopaedia Zoologica, Illustrated in Colours. pt. 3. Y. K. Okada *et al.* Hokuryukan Co., Tokyo, Japan, 1960. 266 pp. Illus. \$16.

The Evolution of Man. A brief introduction to physical anthropology. Gabriel Ward Lasker. Holt, Rinehart and Winston, New York, 1961. 255 pp. Illus. \$3.50.

Existential Psychology. Rollo May, Ed. Random House, New York, 1961. 126 pp. Paper, \$0.95. The papers, with the exception of certain parts added to the first chapter, were presented in a symposium at the annual convention of the American Psychological Association, 1959. Papers by Rollo May, G. Allport, H. Feifel, A. Maslow, and C. Rogers.

Experimental Ecology of the Feeding of Fishes. V. S. Ivlev. Translated from the Russian by Douglas Scott. Yale Univ. Press, New Haven, Conn., 1961. 310 pp. Illus.

Fundamentals of Radiobiology. Z. M. Bacq and Peter Alexander. Pergamon, New York, ed. 2, 1961. 567 pp. Illus. \$12.

Germ Plasm Resources. Publ. 66. Ralph E. Hodgson, Ed. AAAS, Washington, D.C., 1961. 393 pp. \$9.75; members' cash price, \$8.50. A symposium presented at the AAAS Chicago meeting, December 1959.

Grundriss der Allgemeinen Zoologie. Alfred Kuhn. Thieme, Stuttgart, Germany, 1961. 308 pp. Illus. DM. 18.80.

Indian Tobacco. Indian Central Tobacco Committee, Madras, 1960. 439 pp. \$10.

Indian Woods. Their identification, properties, and uses. vol. 1, *Dilleniaceae to Elaeocarpaceae.* K. A. Chowdhury and S. S. Ghosh. Forest Research Inst., Dehra Dun, India, 1958. 304 pp. + 30 plates. Illus. Rs. 25.50. The first of a planned six-volume series which aims to give all up-to-date information on species represented in the collection of the institute. Each volume will cover 250 to 300 species.

The Manipulation of Human Behavior. Albert D. Biderman and Herbert Zimmer, Eds. Wiley, New York, 1961. 335 pp. Illus. \$7.95. Seven original papers prepared for this study by R. R. Blake, R. C. Davis, L. A. Gottschalk, L. E. Hinkle, Jr., P. E. Kubzansky, M. L. Meltzer, J. S. Mouton, and M. T. Orne.

Morphology of the Angiosperms. Arthur J. Eames. McGraw-Hill, New York, 1961. 531 pp. Illus. \$13.50.

One Patient at a Time. A medical cen-