

deep. The origin of life is covered in a page, adaptation of mammals in a page, bird migration in four paragraphs, green algae in a page and half, angiosperms in three pages, diptera in a paragraph, ciliates in a page, hurricanes in a paragraph, "galaxy organization" in two paragraphs, and "organization of the universe" in four paragraphs. This list could be greatly extended.

Yet is this kind of criticism really justified? Is there not a great need for the means whereby the average citizen and the statesman alike can become scientifically literate over a rather broad spectrum? In fact this book devotes about 80 pages to geology and other earth sciences, 200 to the classification of plants and animals, and 100 to ecology *sensu strictu*. There is clearly much of genuine value, accurate, up-to-date, simply stated, and worth knowing. Each chapter is provided with a truly admirable list of references. With very few exceptions, the many line drawings are both pleasing and informative.

There are obvious places that could profit by reworking in a second edition. The treatment of evolution, especially on the important theoretical side, is very weak. To the innocent student such statements as "variation is primarily due to heredity and environmental influence upon the basic hereditary pattern" will not sound like natural selection but rather like Buffon and Saint-Hilaire's theory of direct environmental action on the germ plasm. The discussion of orthogenesis needs to be sharpened up. There is no discussion of the principle of competitive exclusion, surely one of the most nearly universal and most revealing principles of ecology, and one which can be found in Darwin long before its more recent reformulation by Gause and by Hardin. The book is a courageous attempt at a worthy objective. I wonder if it would not have had a sharper focus and a more incisive style had its title been "Ecology"?

GAIRDNER B. MOMENT

Department of Biological Sciences,  
Goucher College

## New Books

### Biological and Medical Sciences

**Advances in Biochemistry.** Proceedings, Summer School in Biochemistry (Srinager, India), 1962. P. S. Sarma, Ed. Indian Inst. of Science, Bangalore, 1963. 459 pp. \$5.

**Advances in Biology of Skin.** vol. 4, *The Sebaceous Glands*. Proceedings, Brown University symposium (Providence, R.I.), 1962. 272 pp. Illus. \$12.50.

**Being-in-the-World.** Selected papers of Ludwig Binswanger. Translated from the German by Jacob Needleman. Basic Books, New York, 1963. 380 pp. Illus. \$10. Papers selected by Needleman in consultation with Binswanger. Needleman has provided an introduction in which he discusses the origins of Binswanger's ideas, their evolution, and their relevance.

**Biochemical Clinics.** An integrated series of international symposia. vol. 2, *The Kidney*. I. Newton Kugelmas. Donnelly, New York, 1963. 543 pp. Illus.

**Chemotaxonomie der Pflanzen.** vol. 2, *Monocotyledoneae*. R. Hegnauer. Birkhauser, Basel, Switzerland, 1963. 540 pp. Illus. SF. 98.

**The Ecology of North America.** Victor E. Shelford. Univ. of Illinois Press, Urbana, 1963. 632 pp. Illus. \$10.

**Epizootiology of Cancer in Animals** (*Annals of the New York Academy of Sciences*, vol. 108, art. 3, pp. 617-1326). Harold E. Whipple, Ed. New York Acad. of Sciences, New York, 1963. Illus. Paper, \$10.

**The Evolution of the Metazoa.** Jovan Hadzi. Pergamon, London; Macmillan, New York, 1963. 511 pp. Illus. \$14.

**Expression of the Emotions in Man.** Peter H. Knapp, Ed. International Universities Press, New York, 1963. 363 pp. \$7.50. Papers and discussions from the symposium held at the 1960 annual meeting of the AAAS (New York).

**The Flowering Process.** Frank B. Salisbury. Pergamon, London; Macmillan, New York, 1963. 246 pp. Illus. \$8.50.

**Food Technology the World Over.** vol. 1, Europe, Canada and the United States, and Australia. Martin S. Peterson and Donald K. Tressler, Eds. Avi Publishing Co., Westport, Conn., 1963. 550 pp. Illus. \$15.

**Hypnosis and Suggestion in Psychotherapy.** A treatise on the nature and uses of hypnotism. H. Bernheim. Translated from the second revised edition by Christian A. Herter. University Books, New Hyde Park, N.Y., 1963. 444 pp. \$10. The first part of this book (nine chapters on the nature of hypnosis) was first published in French in 1848 (the original title was *suggestive Therapeutics*); the second part (two chapters and 105 case studies) was published in 1886, with a new preface in 1887. The English translation appeared the following year. In an eight-page introduction Ernest R. Hilgard places the book in context and attempts to "highlight just enough of [Bernheim's] ideas to urge the reader to go on and explore for himself."

**International Review of Connective Tissue Research.** vol. 1. David A. Hall, Ed. Academic Press, New York, 1963. 415 pp. Illus. \$14.

**Life and the Physical Sciences.** Harold J. Morowitz. Holt, Rinehart, and Winston, New York, 1963. 128 pp. Illus. Paper.

**Les Maladies des Plantes Maraichères.** C. M. Messiaen and R. Lafon. Institut National de la Recherche Agronomique, Paris, 1963. 153 pp. Illus. F21.

**Medical Terminology.** A programmed text. Genevieve Love Smith and Phyllis E. Davis. Wiley, New York, 1963. 183 pp. Appendixes. Illus. Paper. \$3.95.

**Modern Developments in Audiology.** James Jerger, Ed. Academic Press, New York, 1963. 458 pp. Illus. \$12.

**Morphometry of the Human Lung.** Erwald R. Weibel. Academic Press, New York, 1963. 163 pp. Illus. \$12.

**Pharmacology of the Carotid Body Chemoreceptors.** S. V. Anichkov and M. L. Belen'kii. Translated from the Russian edition (Leningrad 1962) by R. Crawford. Pergamon, London; Macmillan, New York, 1963. 239 pp. Illus. \$8.50.

**Phylogeny and Evolution of Crustacea.** Proceedings of a conference (Cambridge, Mass.), 1962. H. B. Whittington and W. D. I. Rolfe, Eds. Museum of Comparative Zoology, Harvard Univ., Cambridge, Mass., 1963. 204 pp. Illus.

**The Physiological Basis of Mental Activity** (*Electroencephalography and Clinical Neurophysiology*, suppl. No. 24). Proceedings of a symposium (Mexico City), October 1961. Raul Hernandez Peon, Ed. Elsevier, New York, 1963. 295 pp. Illus. \$16.

**Psychology in Relation to Medicine.** R. M. Mowbray and T. Ferguson Rodger. Livingstone, London; Williams and Wilkins, Baltimore, Md., 1963. 407 pp. Illus. \$8.25.

**Psychopharmacology Handbook.** vol. 2, 1960. *Animal Research in Psychopharmacology*. Central nervous system effects. Edited and compiled by Leon S. Otis, John J. Bosley, and Lucy Birzis. U.S. Public Health Service, 1963 (available from GPO, Washington, D.C.). 545 pp. Paper, \$3.

**Radiation and Radiomimetic Chemicals.** Comparative physiological effects. L. A. Elson. Butterworth, Washington, D.C., 1963. 132 pp. Illus. \$5.

**The Rat Brain.** A stereotaxic atlas of the forebrain and lower parts of the brain stem. Joachim F. R. König and Renate A. Klippel. Williams and Wilkins, Baltimore, Md., 1963. 168 pp. Illus. \$15.

**Restoration of Function After Brain Injury.** A. R. Luria. Translated from the Russian edition (Moscow 1948) by Basil Haigh. Pergamon, London; Macmillan, New York, 1963. 291 pp. Illus. \$10.

**The Science of Genetics.** Charlotte Auerbach. Harper, New York (© 1961), 1964. 284 pp. Illus. Paper. \$1.85.

**Smoking and Health.** Report of the Advisory Committee to the Surgeon General. U.S. Public Health Service, Washington, D.C. (order from GPO, Washington, D.C.). 405 pp. Paper, \$1.25.

**The Soybean.** Genetics, breeding, physiology, nutrition, management. A. G. Norman, Ed. Academic Press, New York, 1963. 249 pp. Illus. Paper, \$6.50.

**Strahlenschutz in Forschung und Praxis.** vol. 3. Hans-Joachim Melching, Hans Robert Beck, Hans-Adolf Ladner, and Eberhard Scherer. Rombach, Freiburg, Germany, 1963. 336 pp. Illus. DM. 58.80.

**Tretichnyee Flory Zapadnoy Sabiri** (Tertiary Floras of Western Siberia). P. I. Dorofeyev. Komarov Botanical Inst., Acad. of Sciences of the U.S.S.R., Moscow, 1963. 346 pp. Illus.