

parative physiology, and natural history. As such it represents an approach and a synthesis of continuing validity and interest. This is presented with great lucidity and narrative skill, and the reader is drawn along by the peculiarly felicitous analogies of which von Frisch is such a master.

Unfortunately the author has not been well served by his translator and publisher. There are a number of typographical errors. The translation is over-literal in places and retains the word order of the original at the expense of style and readability, and occasionally at the expense of sense. Units of measure have been half anglicized by translating them from the metric system to inches. One can readily recognize some of these conversions (1250 red blood cells form a row $2/5$ inches long), but other remain mysterious (100-200 stomata in an area of $1/2000$ sq. in.). These are trivial matters, but they impede the enjoyment of the book, particularly by the nonbiologist to whom it is addressed. This is a pity, for a modest amount of editorial work would have remedied the difficulties.

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Notes

Biological Sciences

In format and content, part 2, *Biology, Genetics, Agriculture, Medicine, and Zoology*, of the **Penguin Science Survey, 1961** (edited by S. A. Barnett and Anne McLaren. Penguin Books, Baltimore, Md., 1961. 251 pp. Paper, \$1.45), appears to be a lineal descendant of the now defunct New Biology Series, though the putative paternity is nowhere given. It is roughly the size of two semiannual volumes of New Biology, and its articles are pitched at the same level—that is, at approximately the level of the *Scientific American*.

This first issue includes discussions of the following topics: world health (B. B. Waddy), food production (N. W. Pirie), locust control (Gunn), myxomatosis (H. V. Thompson), the octopus brain (M. J. Wells), viruses (F. K. Sanders), proteins (G. H. Haggis), antigens (N. A. Mitchison), the morphogenesis of pattern (J. M. Smith),

cockroaches (J. W. H. Lawson), and three superior book reviews by S. A. Barnett. J. B. S. Haldane contributes some fascinating reminiscences of his father. Those who take an interest in the son's psychological development will note with interest this sentence: "Although [J. S.] Haldane's philosophy, which approximated to the Advaita philosophy of India, forbade him to be a pessimist, he was not as happy as he might have been had he been a Marxist. . . ."

Donald Michie's discussion of machines-that-learn, with an account of a simple one made out of matchboxes, should be of interest to teachers of high school and college students who are eager for special problems. The article on smoking and lung cancer, by E. Maurice Backett, is admirably clear. W. M. S. Russell's discussion on "the use of animals for experiment" includes a wealth of detail new to me, at least; anyone confronted with antivivisectionist activities should consult this paper written by a man who was, for five years, engaged in the study of humane laboratory techniques.

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New Books

General

Bird. Lois Darling and Louis Darling. Houghton Mifflin, Boston, 1962. 281 pp. Illus. \$5.

The Cavendish Laboratory. Nursery of genius. Egon Larsen. Watts, New York, 1962. 95 pp. Illus. \$3.95.

Ministries of Education: Their Functions and Organization. Kathryn G. Heath. U.S. Department of Health, Education, and Welfare, Washington, D.C., 1962 (order from Superintendent of Documents, GPO, Washington, D.C.). 701 pp. Illus. Paper, \$2.50.

Oeuvres de P. L. Tchebychef. vols. 1 and 2. A. Markoff and N. Sonin. Chelsea, New York, 1962. vol. 1, 720 pp.; vol. 2, 757 pp. Illus. \$27.50.

The Perennial Philosophy. Aldous Huxley. World, Cleveland, Ohio (reprint, © 1944), 1962. 319 pp. Paper, \$1.55.

Physics for the Modern World. E. N. daC. Andrade. Barnes and Noble, New York, 1962. 110 pp. Illus. \$2.

River Basin Survey Papers. Frank H. H. Roberts, Ed. No. 25, *Archaeology of the John H. Kerr Reservoir Basin, Roanoke River Virginia-North Carolina*. Carl F. Miller. Smithsonian Institution, Washington, D.C., 1962. 463 pp. Illus. \$4.

To the Ends of the Earth. The explorations of Roald Amundsen. J. Gordon Vaeth. Harper and Row, New York, 1962. 231 pp. Illus. \$3.50.

Mathematics, Physical Sciences, and Engineering

Advances in Computers. vol. 3. Franz L. Alt and Morris Rubinoff, Eds. Academic Press, New York, 1962. 314 pp. Illus. \$12.

Astronomy of the 20th Century. Otto Struve and Velta Zeberg. Macmillan, New York, 1962. 544 pp. Illus. \$12.50.

Chemistry of Carbon Compounds. vol. 5, Miscellaneous and General Index. E. H. Rodd, Ed. Elsevier, New York, 1962. 930 pp. Illus. \$29.

Chlorine. Its manufacture, properties, and uses. J. S. Sconce. Reinhold, New York, 1962. 911 pp. Illus. \$25.

Continental Drift. S. K. Runcorn, Ed. Academic Press, New York, 1962. 350 pp. Illus. \$12.

Dictionary of General Physics. Compiled and arranged by W. E. Clason. Elsevier, New York, 1962. Unpaged. \$22.50.

Electrical Instruments and Measurements. W. Alexander. Cleaver-Hume, London, ed. 2, 1962. 350 pp. Illus. 25s.

The Electronics of Laboratory and Process Instruments. V. S. Griffiths and W. H. Lee. Interscience (Wiley), New York, 1962. 384 pp. Illus. \$9.50.

Eléments de Calcul des Probabilités. Théorique et appliqué. J. Bass. Masson, Paris, 1962. 219 pp. Illus. NF. 34.

Fish as Food. vol. 2, *Nutrition, Sanitation, and Utilization*. Academic Press, New York, 1962. 794 pp. \$25.

Gas Chromatography Abstracts, 1961. C. E. H. Knapman and C. G. Scott, Eds. Butterworth, Washington, D.C., 1962. 229 pp. \$8.50.

Lectures on the Many-Body Problem. E. R. Caianiello, Ed. Academic Press, New York, 1962. 356 pp. Illus. \$10.50.

Logiques Construites par une Méthode de Dédution Naturelle. J. Dopp. Nauwelaerts, Louvain, Belgium; Gauthier-Villars, Paris, 1962. 191 pp. Illus. BFr. 220.

Materials Science and Technology for Advanced Applications. Donald R. Mash, Ed. Prentice-Hall, Englewood Cliffs, N.J., 1962. 777 pp. Illus. \$12.

Metallurgy of Semiconductor Materials. Metallurgical Society Conferences, vol. 15. John B. Schroeder, Ed. Interscience (Wiley), New York, 1962. 423 pp. Illus. \$15.

Nuclear Spectroscopy. Course 15, International School of Physics "Enrico Fermi." G. Racah, Ed. Academic Press, New York, 1962. 267 pp. Illus. \$9.

Programmed Manual for Students of Fundamental Physics. Jay Orear. Wiley, New York, 1962. 16 chapters. Illus. \$4.95.

Recent Developments in Information and Decision Processes. Robert E. Machol and Paul Gray, Eds. Macmillan, New York, 1962. 207 pp. Illus. \$8.

Space Radio Communication. A symposium held in Paris, September 1961. G. M. Brown. Elsevier, New York, 1962. 642 pp. Illus. \$25.

Synthetic Methods of Organic Chemistry. vol. 16. W. Theilheimer. Karger, Basel, Switzerland; Wiley, New York, 1962. 524 pp. \$48.

Theoretical Petrology. Tom. F. W. Barth. Wiley, New York, ed. 2, 1962. 427 pp. Illus. \$12.75.