

metric methods as fiber spaces in number theory (K. Yamazaki, following ideas of A. Weil); and number theory in algebraic varieties (A. Neron). Algebraic geometry is well represented: M. Nagata gives a systematic exposition of his general treatment of intersection multiplicities, following notions of C. Chevalley; J. P. Serre shows how the new methods of homological algebra yield improved proofs of the Cohen-Macaulay theorems, and so on. Other articles follow, and the volume ends with 17 short notes by younger Japanese mathematicians. As a statement by the visitors (page xxxi) points out, the material conditions of young Japanese scientists are not favorable, but their devotion and talent are amply displayed here.

SAUNDERS MACLANE
University of Chicago

New Books

The Origin of Life on the Earth. A. I. Oparin. Translated from the Russian by Ann Synge. Academic Press, New York, rev. ed. 3, 1957. 513 pp. \$6.80.

Edward Williams Morley. His influence on science in America. Howard R. Williams. Chemical Education, Easton, Pa., 1957. 293 pp.

An Introduction to Genetic Statistics. Oscar Kempthorne. Wiley, New York; Chapman & Hall, London, 1957. 572 pp. \$12.75.

Better Biology for High School. D. K. Gillespie. Vantage Press, New York, 1957. 249 pp. \$3.50.

Check-List of North American Birds. Prepared by a committee of the American Ornithologists' Union. American Ornithologists' Union, 1957. 704 pp.

Hepatitis Frontiers. Frank W. Hartman, Gerald A. LoGrippe, John G. Mateer, James Barron. Little, Brown, Boston, 1957. 605 pp. \$12.50.

Radiation Effects in Solids. G. J. Dienes and G. H. Vineyard. Interscience, New York, 1957. 234 pp. \$6.50.

Cosmic View. The universe in 40 jumps. Kees Boeke. Day, New York, 1957. 48 pp. \$3.25.

Social and Cultural Dynamics. A study of change in major systems of art, truth, ethics, law and social relationships. Pitirim Sorokin. Sargent, Boston, revised and abridged in one volume, 1957. 718 pp. \$7.50.

Treatise on Marine Ecology and Paleocology. vol. 2, Paleocology. Memoir 67. Harry S. Ladd, Ed. Geological Society of America, New York, 1957. 1087 pp. \$10.

New Frontiers of Knowledge. A symposium by distinguished writers, notable scholars and public figures. Public Affairs Press, Washington, 1957. 135 pp. \$2.75.

El Archipiélago de Los Roques y La Orchila. Sociedad de Ciencias Naturales la Salle, Caracas, Venezuela, 1956. 257 pp.

The Elements of Physics. Alpheus W. Smith and John N. Cooper. McGraw-Hill, New York, ed. 6, 1957. 683 pp. \$7.50.

Guide to the Microscope. Arthur Beiser. Dutton, New York, 1957. 127 pp. \$3.25.

Education for Planning: City, State and Regional. Harvey S. Perloff. Johns Hopkins Press (for Resources for the Future), Baltimore, 1957. 199 pp. \$3.50.

Chronic Illness in a Large City. The Baltimore Study. vol. IV of *Chronic Illness in the United States*. Commission on Chronic Illness. Harvard University Press (for the Commonwealth Fund), Cambridge, Mass., 1957. 639 pp. \$8.

Community Involvement. The webs of formal and informal ties that make for action. Christopher Sower, John Holland, Kenneth Tiedke, Walter Freeman. Free Press, Glencoe, Ill., 1957. 323 pp. \$5.

College Men at War. Memoirs, vol. 24. John P. Monks. American Academy of Arts and Sciences, Boston, 1957. 334 pp. \$10.00.

The Origins of Modern Science 1300-1800. H. Butterfield. Macmillan, New York, ed. 2, 1957. 252 pp. \$3.

West Africa. A study of the environment and of man's use of it. R. J. Harrison Church. Longmans, Green, London, 1957 (order from Longmans, Green, New York). 574 pp. \$8.75.

Biochemie der Ernährung. K. Lang. Steinkopff, Darmstadt, Germany, 1957. 426 pp. DM. 54.

The American Idea of Mission. Concepts of national purpose and destiny. Edward McNall Burns. Rutgers University Press, New Brunswick, N.J., 1957. 397 pp. \$9.

Automation: What It Is, How It Works, Who Can Use It. Carl Dreher. Norton, New York, 1957. 128 pp. \$2.95.

Neutron Cross Sections. Donald J. Hughes. Pergamon Press, New York, 1957. 192 pp. \$5.

Fear: Contagion and Conquest. James Clark Moloney. Philosophical Library, New York, 1957. 153 pp. \$3.75.

The Numbers of Man and Animals. J. B. Cragg and N. W. Pirie, Ed. Oliver and Boyd (for the Institute of Biology), Edinburgh, 1957 (order from Macmillan, New York). 160 pp. \$2.75.

Installing Electronic Data Processing Systems. Richard G. Canning. Wiley, New York; Chapman & Hall, London, 1957. 203 pp. \$6.

The Economics of Under-Developed Countries. Peter T. Bauer and Basil S. Yamey. University of Chicago Press, Chicago, 1957. 284 pp. \$2.25.

Biological Effects of Whole-Body Gamma Radiation on Human Beings (U). Harold O. Davidson. Johns Hopkins Press (for Operations Research Office, Johns Hopkins University), Baltimore, 1957. 101 pp. \$3.

Catalysis. vol. 5, *Hydrogenation, Oxosynthesis, Hydrocracking, Hydrodesulfurization, Hydrogen Isotope Exchange and Related Catalytic Reactions.* Paul H. Emmett, Ed. Reinhold, New York; Chapman & Hall, London, 1957. 548 pp. \$15.

Trends in Gerontology. Nathan W. Shock. Stanford University Press, Stanford, Calif., ed. 2, 1957. 223 pp. \$4.50.

The Inner Metagalaxy. Harlow Shapley. Oxford University Press, London; Yale University Press, New Haven, Conn., 1957. 217 pp. \$6.75.

Miscellaneous Publications

(Inquiries concerning these publications should be addressed, not to Science, but to the publisher or agency sponsoring the publication.)

Paralepididae II (Macroparalepis). Taxonomy, ontogeny, phylogeny and distribution. Carlsberg Foundation's oceanographical expedition round the world 1928-30 and previous "Dana"-expeditions. Vilh. Ege. Carlsberg Foundation, Copenhagen, Denmark, 1957. Kr. 28.

Botany. Laboratory manual. Erich Steiner, Alfred S. Sussman, Warren H. Wagner, Jr. Dryden Press, New York, 1957. 260 pp. \$3.40.

Digital Differential Analyzers. George F. Forbes. The author, 10117 Bartee Ave., Pacoima, Calif., ed. 4, 1957. 175 pp. \$5.

The Electrophysiology of the Heart. Annals, vol. 65, art. 6. Hans H. Hecht, conference chairman and consulting editor. 494 pp. \$4.50. *Proteolytic Enzymes and Their Clinical Application.* vol. 68, art. 1. Gustav J. Martin, consulting editor and conference chairman. 224 pp. \$3.50.

Biological Applications of Infrared Spectroscopy. vol. 69, art. 1. Robert P. Bauman, consulting editor. 254 pp. \$3.50.

Modern Ideas on Spontaneous Generation. vol. 69, art. 2. Ross F. Nigrelli, conference chairman and consulting editor. 122 pp. \$2.50. *Second Conference on Sulfonamides.* vol. 69, art. 3. Perrin H. Long, consulting editor. 148 pp. \$3.

The Role of I^{131} -Labeled Proteins in Biology and Medicine. vol. 70, art. 1. S. P. Masouredis, conference chairman and consulting editor. 152 pp. \$3. *Determination of SR^{90} and BA^{40} in Bone, Dairy Products, Vegetation, and Soil.* vol. 71, art. 2. H. L. Volchok, J. L. Kulp, W. R. Eckelmann, J. E. Gaetjen. 12 pp. \$0.75. *Transplantation of Fins in Xiphophorus Fishes.* vol. 71, art. 3. Klaus D. Kallman and Myron Gordon. 16 pp. \$0.75. New York Academy of Sciences, New York, 1957.

A Restudy of the 1917 Eruption of Volcán Bóqueron, El Salvador, Central America. Fieldiana: Geology, vol. 10. No. 30. Sharat Kumar Roy. 20 pp. \$0.75. *The Problems of the Origin and Structure of Chondrules in Stony Meteorites.* vol. 10, No. 31. Sharat Kumar Roy. 14 pp. \$0.50. Chicago Natural History Museum, Chicago, 1957.

Eocene Mollusca from Nigeria: a Revision. Bulletin, Geology, vol. 3, No. 2. Frank E. Eames. 48 pp. 25s. *A Revision of the Lake Victoria Haplochromis Species (Pisces, Cichlidae).* pt. II, H. Sauvagei (Pfeffer), H. Prodrum Trewavas, H. Granti Blgr., and H. Xenognatus, Sp. N. Bulletin, Zoology, vol. 5, No. 4. P. H. Greenwood. 22 pp. 8s. *Neuroptera and Trichoptera Collected by Mr. J. D. Bradley on Guadalcanal Island, 1953-54.* Bulletin, Entomology, vol. 5, No. 7. D. E. Kimmins. 22 pp. 7s. *Odonata Collected by Mr. J. D. Bradley on Guadalcanal Island, 1953-54.* Bulletin, Entomology, vol. 5, No. 8. D. E. Kimmins. 12 pp. 4s. The British Museum (Natural History), London, 1957.

The Public Health Laboratory Service. First report of the Expert Committee on Health Laboratory Methods. WHO Tech. Rept. Ser., No. 128. World Health Organization, Geneva, 1957. 49 pp. \$0.60.