

is not a neat, clearly identifiable problem area like the functions of the adrenal cortex, the conditions of blood clotting, or the nature of the nerve impulse. It is a concept about which metaphysicians and epistemologists have worried for centuries, a concept that must be given at least a provisional definition before scientists can profitably make it the object of interdisciplinary study.

A working agreement as to the nature of the problem may have been achieved at the first meeting, but if so, it seems to have been forgotten. The record of the fourth meeting presents three short and extremely able papers by Roy R. Grinker, Talcott Parsons, and Jean Piaget, respectively, followed by 121 pages of discussion. Individual contributions are always interesting and frequently informative, but it is difficult to find any thread of development that suggests that a problem is being gradually clarified. Perhaps the final volume will provide the needed synthesis.

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***A Field Guide to the Birds of Britain and Europe.***

Roger Tory Peterson, Guy Mountfort, and P. A. D. Hollom. Houghton Mifflin, Boston, 1954. xxxiv + 318 pp. Illus. + plates. \$5.

So far as illustrations are concerned, this attractive pocket volume is entirely the work of the American ornithologist and bird painter, Roger Tory Peterson. Of these, there are 1200, and they follow the familiar Peterson method which is primarily patternistic. Six hundred and fifty-four of the illustrations are in color, and a more gemlike brilliance and precise register could not be asked. The text is the work of two well-known British ornithologists. Guy Mountfort is largely responsible for the immense labor of compiling a complex book for which the scientific literature of some 20 languages for the past many years had to be reviewed, and for which the nomenclature of numberless authors had to be weighed and edited into the latest official usage. The 380 distribution maps showing breeding and wintering grounds and the descriptions of the ranges are the work of P. A. D. Hollom. Subspecies are dealt with only when recognizable in the field. Dutch, French, German, and Swedish names are added to the English names, and North American names are included where the bird is conspecific but the name is different (for example, sand martin in England, bank swallow in America, for *Riparia riparia*). Foreign editions in these other languages are scheduled for early publication.

The present volume includes every one of the 551 species of Europe west of the U.S.S.R., which apparently has been excluded for reasons of poor communication and fieldwork facilities at the present time. Even so, Russian ornithological literature has been researched and much of its results included.

Speaking as an American who lived for 6 years in Europe, always deep in the country, I can say that many hours of fruitless search would have been saved

me if I had possessed the present volume while trying to identify hoopoes, rollers, wall-runners, and the many species of *Sylvia*, so strange to New World eyes. This pocket volume will certainly accompany me on my trip to Europe next spring, as more important to a naturalist than language phrase-books or guides to art treasures.

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***Electronics.*** A textbook for students in science and engineering. Thomas Benjamin Brown. Wiley, New York; Chapman & Hall, London, 1954. xi + 545 pp. Illus. \$7.50.

This textbook deals quite broadly with the field of electronics. The topics range from physical electronic principles to microwave applications. The treatment is essentially descriptive with a minimum of mathematical analysis. It would appear to be most suitable for use in a course for students whose major field of interest is other than electronics. For this reason, Brown's book will no doubt be welcomed by those schools that offer survey courses in electronics for students in mechanical and chemical engineering.

I feel that the inclusion of laboratory experiment instructions in the body of the text is unfortunate since the continuity of material is sacrificed, and the book is, therefore, somewhat difficult to read. A further handicap is the use of somewhat unconventional terminology such as "full-cycle power supply" rather than "full-wave rectifier" and "feedback product" rather than "loop gain."

This textbook should prove helpful to individuals who wish to gain a general knowledge of the present state of the electronic art.

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***The Biochemistry of Genetics.*** J. B. S. Haldane. Macmillan, New York, 1954. 144 pp. \$2.75.

Although the author states that this book is written for the biochemist, and not for the geneticist, there is no doubt that most geneticists can gain a great deal from it. In fact, the geneticist is told in many ways that the future of genetics is in the physiological approach and also that most of the simple chemical models that the geneticist uses are obsolete. There is not only a reiteration of the generally accepted premise that there is a biochemical basis underlying all genetically controlled variations, but there is also an emphasis on how little is really known about the processes themselves and the associated inhibitions, competitions, rates, and so forth. Most biochemical processes that have been studied are remote from the primary gene action.

Haldane speculates in a manner that is pleasing, being neither overly dogmatic nor overly apologetic. The thesis that there is a major evolutionary trend toward

biochemical complexity is an interesting possibility. Associated with this is his suggestion concerning heterozygosity and mixed enzymes. His views on adaptive enzymes, mutagenesis, and crossing-over are certainly provocative. For the biochemist, this book will indicate some of the questions that the physiological geneticist wants answered; for the geneticist, the book will indicate some of the potentialities of a biochemical approach.

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## New Books

- Plant Regulators in Agriculture.** H. B. Tukey, Ed. Wiley, New York; Chapman & Hall, London, 1954. x + 269 pp. Illus. \$5.50.
- Annual Report of the Board of Regents of the Smithsonian Institution.** Showing the operations, expenditures, and condition of the Institution for the year ended 30 June 1953. Pub. 4149, 1954 (Order from Supt. of Documents, GPO, Washington 25). ix + 481 pp. Illus. + plates. \$3.75.
- The Design and Use of Instruments and Accurate Mechanism.** Underlying principles. T. N. Whitehead. Dover, New York, printing 2, 1954. xiv + 283 pp. Illus. Paper, \$1.95; cloth, \$3.50.
- Exploring Our National Parks and Monuments.** Devereux Butcher. Houghton Mifflin, Boston, ed. 4, 1954. viii + 288 pp. Illus. \$4.50.
- Plastics Engineering Handbook.** Society of the Plastics Industry. Reinhold, New York, ed. 2, 1954. xxxv + 813 pp. Illus. \$15.
- Teen-Agers.** A health and personal development text for all teen-agers. Gladys Gardner Jenkins, W. W. Bauer, and Helen S. Shacter. Scott, Foresman, Chicago, 1954. 288 pp. Illus. \$3.60.
- Bibliography and Index of Geology Exclusive of North America.** vol. 18. Marie Siegrist, Mary C. Grier, and Marcia Lakeman. Geological Society of America, New York, 1954. xiv + 599 pp.
- Readings in General Psychology.** Lester D. Crow and Alice Crow. Barnes & Noble, New York, 1954. x + 437 pp. Illus. Paper, \$1.75.
- Monomeric Acrylic Esters** Edward H. Riddle. Reinhold, New York, 1954. vii + 221 pp. Illus. \$5.
- Men of Other Planets.** Kenneth Heuer. Viking, New York, reissue, 1954 (Pellegrini & Cudahy, New York, 1951). ix + 160 pp. Illus. \$3.
- Collections of a Century.** The history of the first hundred years of the National Museum of Victoria. R. T. M. Pescott. National Museum of Victoria, Melbourne, 1954. x + 186 pp. Illus.
- Practical Physiological Chemistry.** Philip B. Hawk, Bernard L. Oser, and William H. Summerson. Blakiston, New York, ed. 13, 1954. xvi + 1439 pp. Illus. \$12.
- An Introduction to the Study of Fossil Plants.** John Walton. Black, London, ed. 2, 1953 U.S. distr.: Macmillan, New York. x + 201 pp. Illus. \$4.75.
- Explaining the Atom.** Selig Hecht. Rev. by Eugene Rabinowitch. Viking, New York, 1954. xviii + 237 pp. Illus. \$3.75.
- Biochemical Determinants of Microbial Diseases.** René J. Dubos. Harvard Univ. Press Cambridge, 1954. viii + 152 pp. \$3.50.

## Miscellaneous Publications

- Notes on Frogs of the Genus Telmatobius, with Descriptions of Two New Peruvian Species.** Fieldiana; Zoology, vol. 34, No. 26. Karl P. Schmidt. Chicago Natural History Museum, Chicago, 1954. 10 pp. Illus. 20¢.
- Rabies.** Bull., vol. 10, No. 5. World Health Organization, Geneva, 1954 (Order from Columbia Univ. Press, New York 27). 166 pp. Illus. \$1.50.
- Carbonizing Investigations.** pt. 1, *A Review of the Literature.* Wool Textile Research Labs. Tech. Paper No. 2. D. H. Simmonds. Commonwealth Scientific and Industrial Research Organization, Melbourne, 1954. 12 pp.
- Notulae Criticae ad Floram Hispaniae Pertinentes, I.** Bull., Botany, vol. 1, No. 4. V. H. Heywood. British Museum (Natural History), London, 1954. 40 pp. 10s.
- Design of Flexible Pavements.** Highway Research Bd., Research Rpt. 16-B. Natl. Acad. of Sciences-Natl. Research Council, Washington 25, 1954. 77 pp. Illus. \$1.05.
- Forest Statistics for New York Forest District No. 2.** F. S. Ser., N.Y. No. 4. 19 pp. **Forest Statistics for New York Forest District No. 4.** F. S. Ser., N.Y. No. 5. 19 pp. **Forest Statistics for New York Forest District No. 5.** F. S. Ser., N.Y. No. 6. 19 pp. Northwestern Forest Expt. Sta., Upper Darby, Pa., 1954.
- Taxonomic Status of the Mid-Gulf Coast Amphibia.** Tulane Studies in Zoology, vol. 1, No. 12. Imogene R. Hill. Tulane Univ., New Orleans, 1954. 25 pp. Illus. 35¢.
- Washability Studies of Four Virginia Coals.** Bull., Engineering Expt. Sta. Ser., No. 94. Carl Shelton, Jr. Virginia Polytechnic Inst., Blacksburg, 1954. 40 pp. Illus. 25¢.
- On the Problem of the H $\alpha$  Emission in the Shell Stars.** Contribs. No. 32. Anne B. Underhill. 8 pp. Illus. **On the Strength of the Helium Lines in the O-Type Stars.** Contribs. No. 35. Anne B. Underhill. 13 pp. Illus. Dominion Astrophysical Observatory, Victoria, B.C., 1953.
- Water Waste Control at the Plumbing Fixture.** William R. Wallin. Dole Valve Co., Chicago 12, 1954. 7 pp. Illus.
- Meteorología Marítima y Ciclones Antillanos.** Ernesto Sifontes. The author, Estación Meteorológica-Hidrográfica, Ciudad Bolívar, Venezuela, 1953. 59 pp. Illus.
- Gains for Handicapped Children.** Pamph. No. 212. Herbert Yahraes. Public Affairs Committee, New York 16, 1954. 28 pp. Illus. 25¢.
- Quality and Stability of Canned Meats.** A symposium. Robert G. Tischer, James M. Blair, and Martin S. Peterson, Eds. Natl. Acad. of Sciences-Natl. Research Council, Washington 25, 1954. (Order from QM Food and Container Inst. for the Armed Forces, Chicago 9). 135 pp. Illus. Gratis.
- Attitudes of Male Alcoholic Inmates toward Marriage, Family, and Related Problems.** Arthur Lerner. Natl. Assoc. for Mental Health, New York 19, 1954. 15 pp.
- Report of the Committee on the Measurement of Geologic Time, 1952-1953.** Pub. 319. Natl. Acad. of Sciences-Natl. Research Council, Washington 25, 1954. 187 pp. Illus. \$1.50.
- Report of the Third Conference on Nutrition Problems in Latin America.** Caracas, Venezuela, 19-28 Oct. 1953. Nutrition Meetings Rpt. Ser., No. 8. Food and Agriculture Organization of the United Nations, Rome, 1954 (Order from Columbia Univ. Press, New York 27). 60 pp. 50¢.
- Report to Congress on the Mutual Security Program for the Six Months Ended June 30, 1954.** Foreign Operations Administration, Washington 25, 1954. 63 pp. Illus.