the ability of the individual "living in the secret chamber of himself" to use "experience of beauty and faith to get [himself] through"; and collective confidence in presenting to the rest of the world "a coherent, sensible, and persuasive philosophy of democracy."

The author's main purpose, however, is to alert us to a dangerous imbalance in our national culture. For example, in 1951, the per capita expenditure for original research in science was estimated to be \$1800; in the social sciences, \$600; and in the humanities, \$130. The endowment of the American Council of Learned Societies is \$65,000, that of the Social Science Research Council, about \$3 million, while the National Research Council "does not have to worry about endowment since it is supported by the United States Government."

In urging a better balance, Jones values the natural and social sciences too highly to suggest that they be deemphasized, but he points out that support for the humanities does need to be brought into line. He proposes modestly that "we ought immediately to increase our support . . . by at least fifty million dollars a year-and then go on from there" and itemizes twenty specific needs which the humanities can be expected to meet. That we will not as a nation make the necessary effort, once we really understand the issues involved, is unthinkable. We must look to the humanists for vigorous leadership-the kind of leadership of which this book is an admirable example.

THEODORE ANDERSSON Department of Romance Languages, University of Texas

Miscellaneous Publications

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

The Atlantic Cable. Bern Dibner. Burndy Library, Norwalk, Conn., 1959. 95 pp. Cloth, \$3.50; paper, \$2.50.

Australia, Commonwealth Scientific and Industrial Research Organization, Tenth Annual Report, 1957–58. Parliament of the Commonwealth of Australia, Canberra, 1959. 174 pp. 14s.

Axenic Culture of Invertebrate Metazoa: A Goal. Annals of the New York Academy of Sciences, vol. 77, art. 2, pp. 25-406. Ellsworth C. Dougherty, Consulting Ed. The Academy, New York, 1959. \$4.50. This series of papers is the result of a conference held and supported by the Academy and by the Kaiser Foundation of Oakland, Calif. The papers are divided as follows: part 1, "The lower Metazoa: free-living forms (except nematodes)"; part 2, "The lower Metazoa: parasitic worms and free-living nematodes"; part 3, "The Mollusca"; part 4, "The Arthropoda: Crustacea and Chelicerata"; part 5, "The Arthropoda: Insecta."

Better Utilization of College Teaching Resources. A summary report. Committee on Utilization of College Teaching Resources. Fund for the Advancement of Education, New York, 1959. 62 pp.

The Biographical Approach to John Dalton. Manchester Literary and Philosophical Society, memoirs and proceedings, vol. 100. Frank Greenaway. The Society, Manchester, England, 1959. 98 pp. £1 1s.

The Chemical Industry Facts Book. Manufacturing Chemists' Association, Inc., 1625 Eye St., NW, Washington, ed. 3, 1959. 149 pp. \$1.25.

Commemoration of the Centennial of the Publication of "The Origin of Species" by Charles Darwin. Proceedings of the American Philosophical Society, Philadelphia, vol. 103, No. 2, pp. 159-319. 23 Apr. 1959. \$1. Contents: "The crucial evidence for human evolution" (W. E. LeGros Clark); "The concept of natural selection: a centennial view" (I. M. Lerner); "Variation and heredity transmission" (C. Stern); "Darwin's views on variation under domestication in the light of present-day knowledge" (A. Müntzing); 'Isolation as an evolutionary factor" (E. Mayr); "The role of hybridization in evolution" (G. L. Stebbins); "Variation and evolution" (T. Dobzhansky); "The nature of the fossil record" (N. D. Newell); "Anatomy and morphology: Classification and evolution, 1859 and 1959" (G. G. Simpson); "Darwin and zoogeography" (P. J. Darlington, Jr.).

Current Research and Development in Scientific Documentation. No. 4. Office of Science Information Service, National Science Foundation, Washington (order from Supt. of Documents, GPO, Washington 25). 85 pp. \$0.15.

Engineering Societies Directory, 1959. International and national joint bodies; national, state, regional, and local societies; registration; Canadian societies. Engineers Joint Council, 29 W. 39th St., New York, 1959. 36 pp. A revision of the 1956 edition.

An Evaluation of the First Academic-Year Institute, University of Utah, 1957– 58. Frank B. Jex and Reed M. Merrill. University of Utah, Salt Lake City, 1959. 65 pp.

Geophysical Activity in 1958. Committee on Geophysical Activity, Society of Exploration Geophysicists, Tulsa, Okla., 1959. 36 pp.

Germfree Vertebrates: Present Status. Annals of the New York Academy of Sciences, vol. 78, art. 1, pp. 1-400. James A. Reyniers, Consulting Ed. The Academy, New York, 1959. \$5. This series of papers is a result of the conference sponsored by the Academy and the Runyon Memorial Fund for Cancer Research. The papers are divided as follows: part 1, "Instrumentation for rearing germfree vertebrates"; part 2, "Rearing germfree vertebrates"; part 3, "Characteristics of germfree and disease-free animals"; part 4, "Use of germfree vertebrates in research"; part 5, "Present status and future development of germfree life studies."

Guides for Developing Curricula for

the Education of Practical Nurses. Dorothea E. Orem. Office of Education, Washington, 1959 (order from Supt. of Documents, GPO, Washington 25). 165 pp. \$0.60.

Haffkine Institute Diamond Jubilee, 1899–1959, Souvenir. Haffkine Institute Celebrations Committee, Bombay, India, 1959. 140 pp.

Hypertension and Coronary Heart Disease: Classification and Criteria for Epidemiological Studies. WHO Technical Report 168. First report of the Expert Committee on Cardiovascular Diseases and Hypertension. World Health Organization, Geneva, Switzerland, 1959. 28 pp. \$0.30.

Introduction to the Physical Sciences. Morris Goran. Free Press, Glencoe, Ill., 1959. 421 pp. \$6.

Machine Design Problems. Donald J. Myatt. McGraw-Hill, New York, 1959. 186 pp. \$5.50.

Mammals of the San Francisco Bay Region. William D. and Elizabeth Berry. 72 pp. The Natural History of the San Francisco Bay Region. Arthur C. Smith. 72 pp. Native Trees of the San Francisco Bay Region. Woodbridge Metcalf. 72 pp. Reptiles and Amphibians of the San Francisco Bay Region. Robert C. Stebbins. 72 pp. University of California Press, San Francisco, 1959. \$1.50 each.

Mathematics for the Academically Talented Student in the Secondary School. Report of a conference. Julius H. Hlavaty, Ed. 48 pp. \$0.60. Mathematics Tests Available in the United States. Sheldon S. Myers. 12 pp. \$0.50. A Guide to the Use and Procurement of Teaching Aids for Mathematics. Emil J. Berger and Donovan A. Johnson. 41 pp. \$0.75. National Council of Teachers of Mathematics, National Education Association, Washington, 1959.

Natural Aerosols and Nuclear Debris Studies. Progress report No. 1. GRD Research Notes No. 8. ASTIA Documents No. 8. ASTIA Documents No. AD 209-539. Atmospheric Circulations Laboratory, Geophysics Research Directorate, U.S. Air Force, Bedford, Mass., 1959 (order from Armed Services Information Agency, Document Service Center, Dayton 2, Ohio). 45 pp.

Notes on Plants and Plant Habitats Observed in the Abydos-Woodstock Area, Pilbara District, Western Australia. Division of Plant Industry technical paper No. 12. Nancy T. Burbidge. Commonwealth Scientific and Industrial Research Organization, Melbourne, Australia, 1959. 16 pp.

The Spectrum of Beta Lyrae. Transactions, vol. 49, pt. 1. J. Sahade, S.-S. Huang, O. Struve, V. Zebergs. American Philosophical Soc., Philadelphia, Pa 1959. 64 pp. \$2.

Symposium on Metabolism. Quarterly, vol. 19, No. 3. Chicago Medical School, Chicago 12, Ill., 1958. 48 pp.

Why Should You Study Physics in High School? American Institute of Physics, 335 East 45 Street, New York, 1959. 16 pp.

World Directory of Veneral-Disease Treatment Centres at Ports. World Health Organization, Geneva, Switzerland, 5th list, 1959. 159 pp. \$1.75.