ral waters which can retain a record of their previous history.

A clear picture of the consequential role of the hydrosphere in such phenomena as climate and erosion is put forth. The geologic behavior of water is related to its extraordinary properties: its existence in nature in the gaseous, liquid, and solid states; and its ability to dissolve most substances on the surface of the earth to at least a limited degree.

The author apparently seeks his principal audience in the lay reader. Although the volume abounds in diagrams and pictures, there is a paucity of tables and equations which would have allowed the author to present his arguments more succinctly. Again, some of the illustrations, taken directly from scientific publications, contain notations that are not explained in the text. There are also many inconsistencies in the use of units; for example, salinities are designated as both parts per thousand and parts per hundred in diagrams on the same page (p. 67). Nonetheless, the author is successful in presenting a vigorous and lively history of the travels of water.

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## New Books

Machine Literature Searching. James W. Perry, Allen Kent, Madeline M. Berry. Western Reserve University Press and Interscience, New York, 1956. 162 pp. \$4.

Elementary Qualitative Analysis (Laboratory manual). Morris F. Stubbs and W. Norton Jones, Jr. Brown, Dubuque, Iowa, 1956. 110 pp. \$2.

The Steel Skeleton. vol. II, Plastic Behavior and Design. J. F. Baker, M. R. Horne, J. Heyman. Cambridge University Press, New York, 1956. 408 pp. \$12.

The Changing Universe. The story of the new astronomy. John Pfeiffer. Random House, New York, 1956. 243 pp. \$4.75.

Work and Authority in Industry. Ideologies of management in the course of industrialization. Reinhard Bendix. Wiley, New York; Chapman & Hall, London, 1956. 466 pp. \$7.50.

Annual Review of Medicine. vol. 7. David A. Rytand, Ed. Annual Reviews, Stanford, Calif., 1956. 611 pp. \$7.

Molecular Flow of Gases. G. N. Patterson. Wiley, New York; Chapman & Hall, London, 1956. 217 pp. \$7.50.

Elements of Genetics. Mendel's laws of heredity with special application to man. Edward C. Colin. McGraw-Hill, New York, 1956. 498 pp. \$5.75.

Integral Functions. Cambridge Tracts in Mathematics and Mathematical Physics, No. 44. M. L. Cartwright. Cambridge University Press, New York, 1956. 135 pp. \$3.50.

The Chemical Constitution of Natural Fats. T. P. Hilditch. Wiley, New York, rev. ed. 3, 1956. 664 pp. \$16. (Inquiries concerning these publications should be addressed, not to Science, but to the publisher or agency sponsoring the publication.)

Committee for the White House Conference on Education, a Report to the President. The Committee, Washington, D.C., 1956 (order from Supt. of Documents, GPO, Washington 25). 126 pp. \$0.40.

The Geography, Birds, and Mammals of the Perry River Region. Spec. Publ. No. 3. Harold C. Hanson, Paul Queneau, Peter Scott. Arctic Institute of America, New York, 1956. 96 pp. \$2 (members, \$1).

The Work of WHO 1955. Annual report of the Director General to the World Health Assembly and to the United Nations. Official Records of WHO 67. World Health Organization, Geneva, 1956. 241 pp. \$2.

Scientific Institutions and Scientists in Latin America. Mexico. vol. 3. United Nations Educational, Scientific and Cultural Organization, Montevideo, Uruguay, 1955. 76 pp.

Australian and New Zealand Association for the Advancement of Science, Report of the Thirty-First Meeting. pt. 1. Australian Journal of Science, vol. 18, No. 3A. Fairway Publications, Sydney, Australia, 1956. 48 pp. 4s. 6d.

Federal Aid in West Virginia. Its impact on state government. W. W. Kaempfer. Bureau for Government Research, West Virginia University, Morgantown, 1956. 72 pp.

Safety through Steep Gradient Aircraft. Supplement to 1955 survey reviewing status and special problems of vertical and short take-off and landing types of aircraft. R. M. Woodham. Daniel & Florence Guggenheim Aviation Safety Center at Cornell University, New York-Los Angeles, 1956. 43 pp. \$0.75.

Bibliography of Mining Theses at U.S. Institutions. Howard L. Hartman. Longwall Mining of Oil Shale. Mark J. Waltch and Donald O. Rausch. Quarterly of the Colorado School of Mines, vol. 51, No. 2. Colorado School of Mines, Golden, 1956. 81 pp. \$1.

The Soils of the Katherine-Darwin Region, Northern Territory. Soil Publ. No. 6. G. A. Stewart. Commonwealth Scientific and Industrial Research Organization, Melbourne, Australia, 1956. 68 pp.

Research in Psychosomatic Medicine. No. 3. Psychiatric Research Reports of the American Psychiatric Association. Edited by members of the Committee on Research, 1954-55. Papers presented at the Southern Regional Conference held under the joint auspices of the American Psychiatric Association and Duke University, School of Medicine, Department of Psychiatry, Durham, N.C., 19-20 Nov. 1954. American Psychiatric Association, Washington, D.C., 1956. 93 pp. \$2.

Department of Scientific and Industrial Research, Report for the Year 1954-55. Cmd. 9690. Her Majesty's Stationery Office, London, 1956. 321 pp. 7s. 6d.

Bulletin of the British Museum (Natural History), Entomology. Index to vol. III, 1953-54. British Museum (Natural History), London, 1953-1954. 7 pp. Poissons Cichlidae. Exploration hydrobiologique du Lac Tanganika (1946– 1947). Résultats Scientifiques, vol. III, pt. 5B. Max Poll. Institut Royal des Sciences Naturelles de Belgique, Brussels, 1956. 619 pp.

The Mosquitoes of Arabia. pt. I. Bull. of the British Museum (Natural History) Entomology. vol. 4, No. 3. P. F. Mattingly and K. L. Knight. 53 pp. 15s. Microlepidoptera from Lord Howe Island and Norfolk Island. Bull., Entomology, vol. 4, No. 4. J. D. Bradley. 22 pp. 6s. Sphecidae (Hym.) récoltés en Libye et au Tibesti par M. Kenneth M. Guichard. Bull., Entomology, vol. 4, No. 5. Jacques De Beaumont. 51 pp. 15s. Birds Collected by Mr. F. Shaw-Mayer in the Central Highlands of New Guinea 1950-1951. Bull., Zoology, vol. 3, No. 10. R. W. Sims. 52 pp. 15s. British Mites of the Subfamily Macrochelinae Trägårdh (Gamasina-Macrochelidae) Bull. of The British Museum (Natural History) Zoology, vol. 4, No. 1. G. Owen Evans and E. Browning. 55 pp. 17s. 6d. The Structure, Evolution and Nomenclature of the Ostracod Hinge. Bull., Geology, vol. 3, No. 1. P. C. Sylvester-Bradley. 21 pp. 12s. 6d. The British Museum (Natural History), London, 1956.

Instructions for Collectors. No. 11. Fossils, Minerals and Rocks. British Museum (Natural History), London, ed. 6, 1956. 16 pp. 1s.

Building Science Directory. pt. 1, Associations and Societies of the Building Industry in the United States. National Academy of Sciences-National Research Council, Washington, 1956. 12 pp. \$2.

British Association for the Advancement of Science, Preliminary Programme for the Annual Meeting. Sheffield, 29 Aug.-5 Sept. 1956. British Association for the Advancement of Science, London W.1, 1956. 25 pp.

Second International Congress of the International Union for the Philosophy of Science, Proceedings. Held in Zurich, Switzerland, August 1954. vol. 1, Plenary Sessions, 159 pp.; vol. 2, Physics, Mathematics, 152 pp.; vol. 3, Theory of Knowledge, Linguistics, 170 pp.; vol. 4, Philosophy and Science, History of Philosophy, 134 pp.; Sociology, Psychology, 107 pp. Dunod, Paris, 1955. Paper, F. 3000 for 5 volumes.

An Anthropological Reconnaissance in the Near East, 1950. Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University, vol. XLVIII, No. 2. Henry Field. Peabody Museum, Cambridge, Mass., 1956. 119 pp. \$2.50.

Low Oxygen Gas Storage Trials of Apples in Tasmania. Div. of Plant Industry Tech. Paper No. 6. D. Martin and J. Cerny. Commonwealth Scientific and Industrial Research Organization, Melbourne, Australia, 1956. 19 pp.

National Institute of Genetics (Japan), Annual Report. No. 5, 1954. National Institute of Genetics, Misima, Sizuoka-ken, Japan, 1955. 90 pp.

Higgins Flat Pueblo, Western New Mexico. Fieldiana: Anthropology, vol. 45. Paul S. Martin, John B. Rinaldo, Elaine A. Bluhm, Hugh C. Cutler. Chicago Natural History Museum, Chicago, Ill., 1956. 218 pp. \$4.50.