

page 34) as being due to misidentification. As to "the other anomalies," according to Arkell (1956, page 104) "doubt is inevitably cast on them also."

The chapter on historical geology appropriately summarizes the objective of stratigraphy.

Students of stratigraphy, particularly beginners, will find the appendix with its practical suggestions for field work and for graphic presentation of results to be a very useful part of the book. The list of references to various manuals could be profitably enlarged by including Busk's *Earth Flexures, Suggestion to Authors*, and a few others.

Minor points, critically mentioned in the preceding paragraphs, do not detract from the general excellence of the book. *Stratigraphic Principles and Practice* merits favorable consideration for adoption as a text in stratigraphy.

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Biochemistry of Plants and Animals. M. Frank Mallette, Paul M. Althouse, and Carl O. Clagett. Wiley, New York, 1960. xiii + 552 pp. Illus. \$8.50.

In writing this textbook the authors had to cope with the difficult problem of presenting a vast amount of biochemical knowledge, in its many ramifications, to students of agriculture with limited preparation in modern physics, chemistry, and biology. Their solution is the best testimony of their broad scientific approach to complex subject matter and of their educational skill. I was surprised and impressed to find such advanced topics as the function of deoxyribonucleic acid and ribonucleic acid, nicotinamide adenine dinucleotide, adenosine triphosphate, biotin, gibberellic acid, auxins, and antiauxins discussed on an elementary level.

In the excellent chapter on mineral metabolism, radiation and radioisotopes are mentioned; in the very good chapter on feedstuffs, the use of antibiotics in livestock feeding has been given proper attention. Although written primarily to serve as a biochemical foundation for those studying the agricultural sciences, the book can also be recommended to all who wish to obtain a condensed review of the present status of biochemical knowledge.

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New Books

Mathematics, Physical Sciences, and Engineering

Pulp and Paper. Chemistry and chemical technology. vol. 1, *Pulping and Bleaching*. James P. Casey. Interscience, New York, ed. 2, 1960. 694 pp. Illus. \$19.50.

Reactions between Complex Nuclei. Alexander Zucker, Frederick T. Howard, and Edith C. Halbert, Eds. Wiley, New York, 1960. 328 pp. Illus. \$7. Proceedings of a conference (2-4 May 1960) sponsored by the American Physical Society and the Oak Ridge National Laboratory.

Reports on Progress in Physics. vol. 22, 1960. A. C. Stickland, Ed. Physical Society, London, 1960. 633 pp.

Rivital Theories of Cosmology. A symposium and discussion of modern theories of the structure of the universe. H. Bondi, W. B. Bonnor, R. A. Lyttleton, and G. J. Whitrow. Oxford Univ. Press, New York, 1960. 76 pp. Illus. \$2.25.

Röntgenographische Chemie. E. Brandenberger and W. Epprech. Birkhauser, Basel, Switzerland, 1960. 272 pp. Illus. F. 32.

Seminar on Transformation Groups. Armand Borel. Princeton Univ. Press, Princeton, N.J., 1960. 251 pp. \$4.50. Contributions by G. Bredon, E. E. Floyd, D. Montgomery, and R. Palais.

Silicon and Its Binary Systems. A. S. Berezhanoi. Translated from Russian. Consultants Bureau, New York, 1960. 283 pp. \$8.50. Originally published in 1958 by the Academy of Sciences of the Ukrainian SSR.

Silicon Carbide. A high temperature semiconductor. J. R. O'Connor and J. Smiltens, Eds. Pergamon, New York, 1960. 540 pp. Illus. \$12.50. Proceedings of a conference (1959) sponsored by Air Force Cambridge Research Center.

Some Ionospheric Results Obtained during the International Geophysical Year. W. J. G. Beynon, Ed. Elsevier, Amsterdam, 1960 (order from Van Nostrand, Princeton, N.J.). 413 pp. Illus. Proceedings of a symposium organized by the URSI/AGI Committee (Brussels, September 1959).

Space Rockets and Missiles. Raymond F. Yates and E. Russell. Harper, New York, 1960. 349 pp. Illus. \$3.50.

Spectra and Analysis. A. A. Kharkevich. Translated from Russian. Consultants Bureau, New York, 1960. 228 pp. \$8.75. Translated from the revised edition published by the State Press for Technical and Theoretical Literature, Moscow, 1957.

Spot Tests in Organic Analysis. Fritz Feigl. Translated by Ralph E. Oesper. Elsevier, Amsterdam, ed. 6, 1960 (order from Van Nostrand, Princeton, N.J.). 695 pp. Illus. \$13.25.

Tables and Nomograms of Hydrochemical Analysis. I. Yu. Sokolov. Translated from Russian. Consultants Bureau, New York, 1960. 85 pp. Paper, \$4.35.

Tables of Lommel's Function of Two Variables. E. N. Dekanosidze. Translated from Russian by D. G. Fry. Pergamon, New York, 1960. 499 pp. \$20.

Vibrations from Blasting Rock. L. Don Leet. Harvard Univ. Press, Cambridge, Mass., 1960. 149 pp. Illus. \$4.75.

Miscellaneous Publications

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

American Midland Naturalist. Cumulative Index. (vols. 1-60). George R. Bernard, Ed. American Midland Naturalist, Notre Dame, Ind., 1958. 530 pp. \$4.25. Contains author, new genera and species, and subject indexes.

Education for Africans in Tanganyika. A preliminary survey. Betty George. U.S. Office of Education, Washington, D.C., 1960 (order from Supt. of Documents, GPO, Washington 25). 97 pp. \$0.40.

The Ending of Wilhelm Reich's Researches. Charles R. Kelley. Interscience Research Inst., Stamford, Conn., 1960. 19 pp. \$0.50. Kelley examines the Reich-orgone energy controversy and recounts his attempts to discuss, with responsible officials, the injunction obtained by the Food and Drug Administration to ban Reich's books and journal publications. Kelley says that he was unable to obtain an appointment with Mrs. Hobby who was the Secretary of Health, Education, and Welfare at the time.

Federal Funds for Science. No. 9, *The Federal Research and Development Budget, Fiscal Years 1959, 1960, and 1961*. National Science Foundation, Washington, D.C., 1960 (order from Supt. of Documents, GPO, Washington 25). 89 pp. \$0.50.

Labor Relations Policy in an Expanding Economy. vol. 333 of *Annals of the American Academy of Political and Social Science*. Marten S. Estey, Ed. The Academy, Philadelphia, Pa., 1961. 213 pp. Cloth, \$3; paper, \$2.

Large Radiation Sources in Industry. vol. 2. International Atomic Energy Agency, Vienna 1, Austria, 1960 (order from UNESCO Publications Center, New York 22). 447 pp. Illus. Paper, \$4.50. This is the second volume of the proceedings of a conference on the application of large radiation sources in industry and especially to chemical processes, which was organized by the Agency at Warsaw on 8-12 September 1959. Four major topics are covered: radiation and chemical reaction, special applications of radiation, radiation and food preservation, and economics of radiation processing.

A Monograph of the Nearctic Plagioclilaceae. Rudolf M. Schuster. American Midland Naturalist, Notre Dame, Ind., 1960. 434 pp. \$4. Papers reprinted from vols. 62 and 63, *American Midland Naturalist*.

Review of Fungal Diseases of Cotton in Egypt. Egyptian Reviews of Science, vol. 3. M. A. Mostafa. Science Council, Cairo, 1959. 55 pp.

Symposium: Speciation and Raciation in Cavernicoles. American Midland Naturalist, Notre Dame, Ind., 1960. 160 pp. \$2.50. Papers presented at the 1959 annual meeting of the AAAS, in a symposium sponsored by the National Speleological Society and the Society of Systematic Zoology.

United States Business Performance Abroad. No. 9, *The General Electric Company in Brazil*. Theodore Geiger. National Planning Assoc., Washington 9, 1961. 105 pp. Paper, \$1.