

meaning of infinity, illustrated by the distribution of numbers in a definite interval—a discussion which will be welcome to teachers who are interested in bringing the meaning of infinity and numbers to the understanding of non-science students.

Schrödinger then discusses the “makeshift of wave mechanics,” his own creation, and the idea of complementarity in the description of particles and waves. While the author speaks whimsically of an “emergency exit” and quotes Eddington as calling it “not a physical theory but a dodge—and a very good dodge, too”—his brief summary is a clear and concise statement of this development, to bring to the attention of the layman the dilemma in the ill-fitting description by words and the perfection of its logical mathematical counterpart in modern physics.

Schrödinger discusses the theory of Bohr and Heisenberg but he, himself, is rather skeptical that this is the last word regarding a theory of nature. “What remains doubtful to me is only just this: Whether it is adequate to term one of the two physically interacting systems the ‘subject.’ *For the observing mind is not a physical system, it cannot interact with any physical system.* And it might be better to reserve the term ‘subject’ for the observing mind” (p. 53).

A brief discussion of “atoms or quanta—the counter-spell of old standing, to escape the intricacy of the continuum,” follows. Schrödinger closes by discussing: “Would physical indeterminacy give free will a chance?” and considers the problem of predictability in the physical world and in the behavior of a living body. “The net result is that quantum physics has nothing to do with the freewill problem. If there is such a problem, it is not furthered a whit by the latest development in physics. To quote Ernst Cassirer again: ‘Thus it is clear . . . that a possible change in the physical concept of causality can have no immediate bearing on ethics.’”

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***Record of the Rocks: The Geological Story of Eastern North America.*** Horace G. Richards. New York: Ronald, 1953. 413 pp. Illus. \$6.00.

This is a book on general historical geology in which the emphasis is on the history of a part of eastern North America—the seaboard states from New York to South Carolina. The book is designed for the general student or reader rather than for the specialist and no previous knowledge or study of physical geology or biology is assumed. There are introductory chapters on the principles of physical geology and on the classification of animals and plants.

The treatment of historical geology begins with a short chapter on the origin of the earth. One chapter is devoted to the pre-Cambrian, after which follow chapters on each Paleozoic and Mesozoic period and Cenozoic epoch. A chart of the general section of the rocks for several states is included with each chapter,

the physical conditions of the period summarized, paleogeographic maps presented, the prominent life forms described, and the economic resources briefly discussed.

As would be expected from an author who is a well-known specialist on the stratigraphy and paleontology of the Atlantic Coastal Plain, the chapters on the Cretaceous period and on the Tertiary epochs are the most detailed in their discussion of stratigraphic information for the states included.

Extensive reading lists give references to modern literature whereby the serious student can pursue various subjects in any desired detail.

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## Scientific Book Register

***Human Behavior: Psychology as a Bio-Social Science.*** Lawrence E. Cole. Yonkers-on-Hudson, N. Y.: World Book, 1953. 884 pp. Illus. \$5.50.

***The Scientific Adventure: Essays in the History and Philosophy of Science.*** Herbert Dingle. New York: Philosophical Library, 1953. 372 pp. \$6.00.

***Pharmaceutical Arithmetic.*** A complete course in everyday problems in dispensing, manufacturing, and hospital pharmacy. 3rd ed. Ignatius J. Bellafiore. St. Louis: Mosby, 1953. 226 pp. Illus. \$4.50.

***The Theory of Homogeneous Turbulence.*** G. K. Batchelor. New York: Cambridge Univ. Press, 1953. 197 pp. Illus. \$5.00.

***Applied Inorganic Analysis: With Special Reference to the Analysis of Metals, Minerals, and Rocks*** (Hillebrand and Lundell). 2nd ed. Revised by G. E. F. Lundell, H. A. Bright, and J. I. Hoffman. New York: Wiley; London: Chapman & Hall, 1953. 1034 pp. Illus. \$15.00.

***Microscopy for Chemists.*** Harold F. Schaeffer. New York-London: Van Nostrand, 1953. 264 pp. Illus. \$4.50.

***Television Receiver Design: I. F. Stages,*** Book VIII-A. A. G. W. Uitjens. Eindhoven: Philips' Technical Library, 1953. U. S. distrib.: Elsevier, Houston. 177 pp. Illus. \$4.50.

***X-ray Sieve Therapy in Cancer: A Connective Tissue Problem.*** Benjamin Jolles. Boston: Little, Brown, 1953. 192 pp. Illus. \$6.00.

***The Primitive City of Timbuctoo.*** Horace Miner. Princeton, N. J.: Princeton Univ. Press, 1953. (For the American Philosophical Society). 297 pp. Illus. + plates. \$5.00.

***Clinical Periodontology: Dynamics and Treatment; A Biologic Approach to Practice.*** Abraham Berliner. New York: Park Press, 1953. 249 pp. Illus.

***Physical Chemistry for Colleges.*** A course of instruction based upon the fundamental laws of chemistry. 7th ed. E. B. Millard. New York-London: McGraw-Hill, 1953. 618 pp. \$6.00.

***The Universe of Meaning.*** Samuel Reiss. New York: Philosophical Library, 1953. 227 pp. \$3.75.

***Engineering Descriptive Geometry.*** The direct method for students, draftsman, architects, and engineers. 2nd ed. Charles Elmer Rowe and James Dorr McFarland. New York-London: Van Nostrand, 1953. 352 pp. Illus. \$5.00; \$4.25 college ed.