

intuitive feeling of what is taking place. At times, in the proofs of theorems, rigor is stressed in dealing with certain concepts whereas the concept itself was not introduced with the rigor that is required.

Theory of Functions of a Complex Variable, the first in a three-volume series, is definitely designed to be used as a textbook. It contains 18 chapters, of which the first is an introduction that has little to do with what follows. Chapter 2 deals with complex numbers, which are introduced sketchily in terms of geometry and complex algebra. In chapters 3, 4, 5, and 6 much of the ground work is laid for the rest of the book. Such topics as limits, continuity, set theory, and topological properties are discussed. The rudiments of complex function theory in the study of analyticity and conformal mapping are discussed in chapters 7 and 8. The topics ordinarily treated in a first course in complex function theory are considered in the rest of the book. Special care has been taken in the study of multi-valued functions, a subject that is often slighted. The latter chapters, on power series, contain valuable material, some of which is more advanced than that presented in many textbooks but which is here presented in a lucid manner.

All things considered, this book will be a valuable addition to the library of any beginner in complex function theory.

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Teaching Monograph Series

Molecular Biology of the Gene. J. D. Watson. Benjamin, New York, 1965. xxii + 494 pp. Illus. Paper, \$5.95; cloth, \$10.

Watson's *Molecular Biology of the Gene* is intended to be a new sort of text for beginning biology students, but it has extraordinary value for sophistates as well. Designed to initiate into biology "the biologists of the future," the book first provides background in biochemistry, physical chemistry, microbiology, and genetics (both classical and microbial); on this background, the second half of the book develops the molecular biology of the gene—chiefly replication, mutation, transcription, translation, regulation, and

differentiation. Since the book grew out of lectures given as *part* of an introductory biology course, it is presumably intended to be a text for only part of a course. Written and illustrated with brilliant clarity and simplicity, with excitement and enthusiasm, the book is nevertheless uncompromising in its intellectual appeal. The logic of discovery and how theory is advanced by the interplay of experiment and thought dominate the narrative. As a rule, Watson presents current molecular doctrine as firmly established. Yet in the last chapter (on cancer) he entertains the possibility of major exceptions to the central DNA-RNA-protein dogma. The debatable aspects of current doctrine are seldom mentioned. After all, these aspects are likely to be decided before today's beginning students become mature investigators. For these students it is more important to have their attention called to virtually complete voids in present knowledge which are likely to be still voids but hopefully ready for fruitful attack when the time comes for the students to select and attack problems. Such voids in knowledge are frequently and forcefully set before the reader, and they come as challenging guides to opportunities for discovery.

My only major objection to the book is the multitude of statements such as "it was immediately obvious that" or "it automatically followed that." In hindsight, this may be true; but it was seldom (or to very few) "immediately obvious" at the time. Would it not be depressing to potential investigators to compare such blitzkrieg operations with the usual tempo of their own progress in thought?

Watson's experience apparently justifies assuming that the book is suited to the level of the beginning biology student at Harvard. I doubt however whether the average of all such biology students could cope with all of its loaded contents, in spite of its clarity and simplicity. For the capable and prepared minority who could, the text would doubtless be a tremendously exciting and valuable experience. From the way the educational wind is blowing, this minority may be expected to grow disproportionately in the years ahead. Watson's text may be considered as a pioneering and immensely successful effort to serve the advanced guard of a new generation of biology students (and teachers).

As I mentioned at the start of the review, this beginning text also has extraordinary value for sophisticates.

Even if the reader knew in advance every fact and idea, which few probably would, he would profit greatly from Watson's comprehensive perspective, from the way he has integrated the background of physical science and biology with molecular biology, from his vision of the relation of molecular and classical approaches to the great problems of biology, from his spotting of the important unknowns, and from his imaginative guesses about them. These are the qualities of the book, far greater than the many trivial errors which will doubtless be corrected, that stimulated me to load the margins of my copy with notes. I am therefore convinced that many graduate students, teachers, and researchers in biology, microbiology, genetics, and biochemistry would share my own reaction to the book. When a textbook for beginners can so stimulate and excite veterans, it is indeed a most remarkable book.

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New Books

General

The Archaeology of New York State. William A. Ritchie. Published for the American Museum of Natural History by the Natural History Press, Garden City, N.Y., 1965. 379 pp. Illus. \$12.50.

The Assistant Medical Officer. The training of the medical auxiliary in developing countries. Edwin F. Rosinski and Frederick J. Spencer. Univ. of North Carolina Press, Chapel Hill, 1965. 213 pp. Illus. \$6.

Bibliography of Vitamin E. vol. 6, 1960–1964. Compiled by Wilma F. Kujawski. Research Laboratories, Distillation Products Industries (Eastman Kodak Company), Rochester, N.Y., 1965. Unpag. Paper, \$3. Approximately 1884 papers are listed.

The Biology of Viruses. Kenneth M. Smith. Oxford Univ. Press, New York, 1965. 152 pp. Illus. \$2. Home University Library of Modern Knowledge, edited by Michael Abercrombie and A. D. Woosley.

Albert Einstein: The Man and His Theories. Hilaire Cuny. Translated from the French edition (Paris, 1962) by Merwyn Savill. Eriksson, New York, 1965. 175 pp. Illus. \$5.

Encounter with the Future. Fred Hoyle. Trident Press, New York, 1965. 128 pp. \$4.95. The Credo Series, edited by Ruth Nanda Anshen.

An Essay on the Causes of the Variety of Complexion and Figure in the Human Species. Samuel Stanhope Smith. Winthrop D. Jordan, Ed. Harvard Univ. Press, Cambridge, Mass., 1965. 345 pp. \$5.95. Reprint of the enlarged version, 1810.

(Continued on page 1383)

NEW BOOKS

(Continued from page 1282)

Explorations in Chemistry. Charles A. Gray. Dutton, New York, 1965. 221 pp. Illus. \$5.95.

From Atoms to Infinity: Readings in Modern Science. Clifford D. Simak, Ed. Harper and Row, New York, 1965. 350 pp. Illus. \$4.95. Thirty-eight articles published during 1963 and 1964 by the Minneapolis *Tribune* in its Science Reading Series. The articles are by Isaac Asimov, Willard Bascom, John Chapman, Victor Cohn, Frank C. Hibben, Willy Ley, Hugh Odishaw, John A. O'Keefe, Harlow Shapley, Clifford D. Simak, and Harry Wexler.

From My Life: The Memoirs of Richard Willstätter. Arthur Stoll, Ed. Translated from the German edition by Lilli S. Hornig. Benjamin, New York, 1965. 479 pp. Illus. \$8.75.

A Fundamental Survey of the Moon. Ralph B. Baldwin. McGraw-Hill, New York, 1965. 159 pp. Illus. \$4.95.

Graphical Methods in Research. A. S. Levens. Wiley, New York, 1965. 225 pp. Illus. \$5.95.

Hospitals, Doctors, and the Public Interest. John H. Knowles, Ed. Harvard Univ. Press, Cambridge, Mass., 1965. 351 pp. Illus. \$8.50. Sixteen papers.

Hysteria: The History of a Disease. Ilza Veith. Univ. of Chicago Press, Chicago, Ill., 1965. 318 pp. Illus. \$7.95.

An Inquiry into Enoughness: Of Bombs and Men and Staying Alive. Daniel Lang. McGraw-Hill, New York, 1965. 232 pp. Illus. \$5.50.

An Invitation to Phenomenology: Studies in the Philosophy of Experience. James M. Edie, Ed. Quadrangle Books, Chicago, Ill., 1965. 286 pp. Illus. Paper, \$2.25; cloth, \$6.50. Fourteen papers.

Island Life: A Natural History of the Islands of the World. Sherwin Carlquist. Published for the American Museum of Natural History by the Natural History Press, Garden City, N.Y., 1965. 463 pp. Illus. \$9.95.

Jahrbuch der Deutschen Akademie der Wissenschaften zu Berlin, 1964. Akademie-Verlag, Berlin, 1965. 958 pp. MDN. 52.50.

The Kennedy Assassination and the American Public: Communication in Crisis. Bradley S. Greenberg and Edwin B. Parker, Eds. Stanford Univ. Press, Stanford, Calif., 1965. 406 pp. \$8.95.

Man Adapting. René Dubos. Yale Univ. Press, New Haven, Conn., 1965. 549 pp. Illus. \$10.

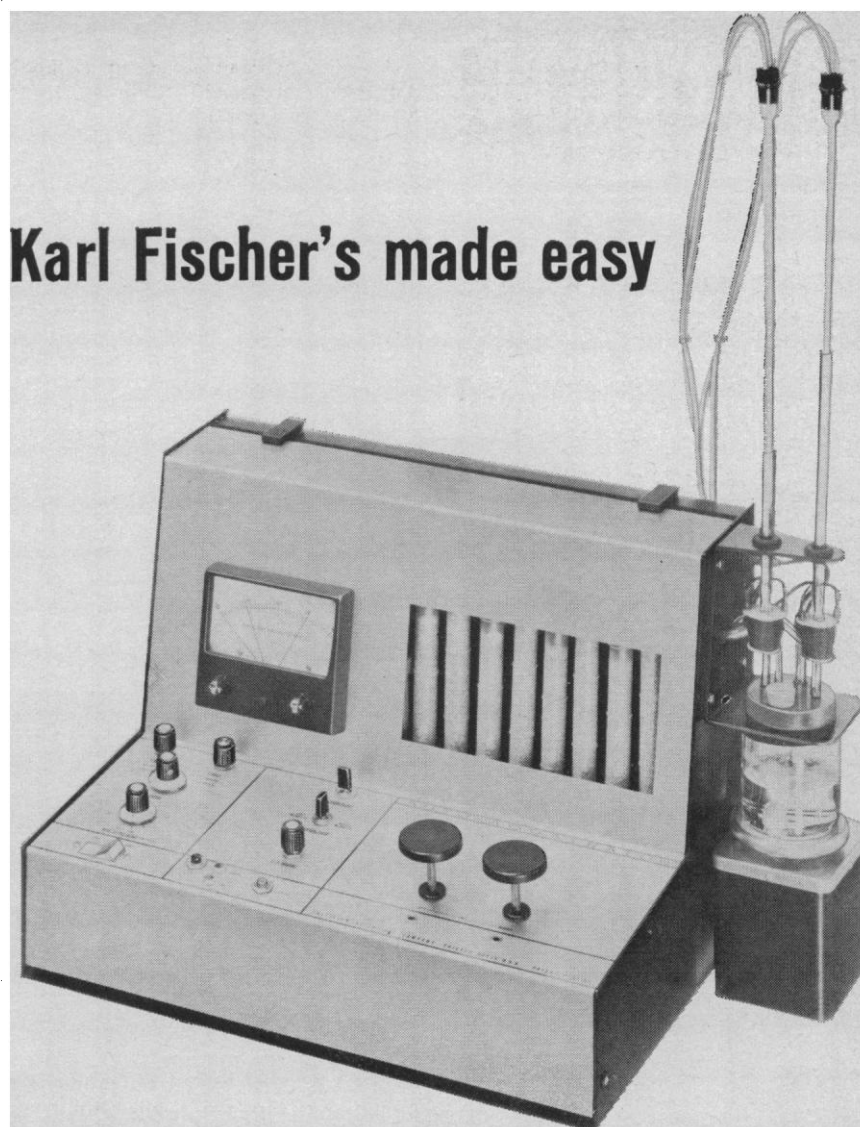
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Matter and Method. R. Harré. Macmillan, London; St. Martin's Press, New York, 1965. 134 pp. \$3.25.

The Measurement of Efficiency of Scientific Research. Ben-Ami Lipetz. Intermedia, Carlisle, Mass., 1965. 278 pp. \$7.

Mechanisms, Linkages, and Mechanical Controls. Nicholas P. Chironis, Ed. McGraw-Hill, New York, 1965. 366 pp. Illus. \$9.75. A compilation of material, mostly from *Product Engineering* magazine.

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New Worlds of Oceanography. E. John Long. Pyramid, New York, 1965. 221 pp. Illus. Paper, 75¢. The Worlds of Science Series, vol. 19.

Ivan Pavlov: The Man and His Theories. Hilaire Cury. Translated from the French edition by Patrick Evans. Eriksson, New York, 1965. 174 pp. Illus. \$5.

The Politics of American Science: 1939 to the Present. J. L. Penick, Jr., C. W. Pursell, Jr., M. B. Sherwood, and D. C. Swain, Ed. Rand McNally, Chicago, Ill., 1965. 295 pp. Illus. Paper. Rand McNally History Series. A collection of readings.

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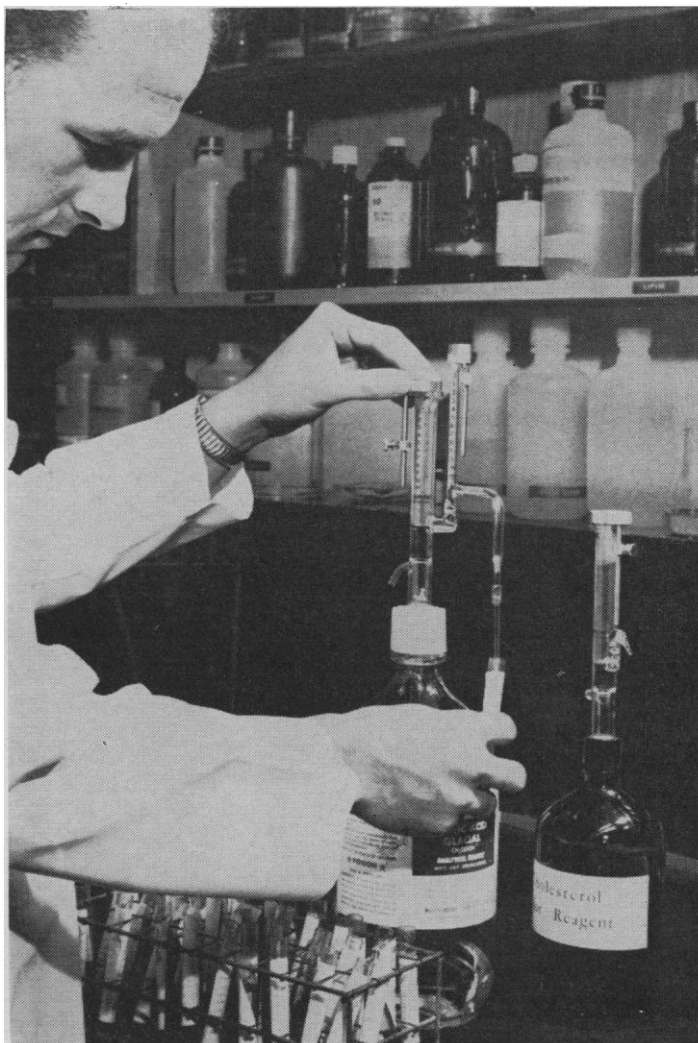
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