

The Leibniz-Clarke Correspondence (with extracts from Newton's *Principia* and *Opticks*). H. G. Alexander, Editor. Philosophical Library, Inc., New York, 1956. lvi + 200 pp. \$4.75.

Brought together in this volume are all of the essentials of the famous philosophical controversy between Leibniz and Clarke, the latter acting chiefly in defense of Newton's *Principia* and *Opticks*.

First published in 1717, the present edition is the first full reprint in English since 1738. A new edition is justified on the premise that post-Newtonian physics has been partially anticipated by the subtleties of some of Leibniz's arguments.

Irrespective of any anticipation of the theory of relativity that may be contained in the correspondence, the entire discussion is now readily available to all students of the history of philosophy.

DUNCAN MCCONNELL

Building an Engineering Career. Clement C. Williams and Erich A. Farber. Third Edition. McGraw-Hill Book Co., New York, 1957. x + 299 pp. \$4.75.

The preface of this third, largely rewritten edition lists nine specific objectives, which are headed by: (1) "To give a preview of the character of the engineering profession and its relation to social organization. . .," and (2) "To assist the student in adopting efficient study methods. . . ." These and the remaining seven comprise extremely difficult, self-imposed assignments.

Professor Farber mentions "the launching of the first man-made earth satellite is planned for 1957," without mentioning by whom—a matter that might have been difficult to predict without an appraisal of America's evaluation of science and engineering in terms of gadgeteering ability.

The dependence of engineering on research in the basic sciences is inadequately considered.

This book should be compulsory reading for every vocational counselor connected with a high school.

DUNCAN MCCONNELL

Philosophy of Science, The Link Between Science and Philosophy. Philipp Frank. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1957. xxii + 394 pp. \$7.65. Test—\$6.00.

In this book Professor Frank explores some of the interrelations between philosophy and science in an attempt to reconcile any separation in viewpoints that may have arisen between scientists and humanists.

Although major portions of the book appear to have been written for the educated lay reader, other portions will interest mature scientists—particularly the chapters on "Theories of Higher Generality" and "Metaphysical Interpretations in Physics."

Throughout the discussions of the relevance and interdependence of physics and philosophy—especially discussions of Einstein's theory of relativity—this reviewer continually sensed an implied restraint of philosophy by the bounds of mathematical development. That Einstein's theory may be quite as incomplete in 2200 A. D. as is Newton's theory today does not seem to have been given adequate credibility, and there appears to be no cogent reason why abstract thought cannot develop independently of the mathematics.

By "science" the author means physics, to the virtual exclusion of life sciences. Promulgation of this popular misconception is unfortunate.

DUNCAN MCCONNELL

The Path of Carbon in Photosynthesis. J. A. Bassham and M. Calvin. Prentice-Hall, Inc., Englewood Cliffs, N. J. 1957. x + 104 pp. \$3.00.

This book will be of particular interest to the botanist and the biochemist who feel the need for a summation of the biochemical studies that are currently leading to a more fundamental understanding of the intricate processes concerned in photosynthesis. A brief historical background culminates in a discussion of the new methods involving tracer elements and paper chromatography. This, along with analytical procedures and a brief discussion of desirable plant material, introduces the reader to the basic objective of the development and presentation of the Photosynthetic Carbon—Reduction Cycle through the use of radiocarbon. The involved chemical reactions, with their appertaining energy and enzyme systems are illustrated by figures and tables. The use of radiocarbon is extended to a brief discussion of fat and amino acid synthesis. Metabolic inhibitors, hydrogen transfer, oxygen evolution and quantum conversion are dealt with briefly because of their involvement in photosynthesis. The material is documented by 142 references which contribute to the versatility of this concisely written monographic reference work.

CLARENCE E. TAFT