

ory the center of the earth's orbit about the sun is taken as the center of the universe. Kepler's innovation moved the center (focus) to the sun itself and gave a mathematical law for the varying velocity of each planet in its orbit. Vital in the computations was new light upon the earth's orbit. In fact, the second law of Kepler that equal areas are swept out in equal times was first demonstrated by Kepler for the earth; the formulation gave the velocity as inversely proportional to the distance from the sun, the "radius-theorem." The final establishment for the orbit of Mars was dependent upon the corrections made possible by the revisions made in the earth's orbit.

In preparing for publication of Kepler's collected works translations proved to be out of the question; the editors have introduced the device of admirable summaries of contents of each volume. In addition there are notes, often giving an indication of the method of work of the author, and the genesis of the ideas; in fact, Kepler himself gives much information along this line, including even material finally rejected. The editors have also included in each volume numerous notes and for the periods concerned available lists of Kepler's correspondence, largely with brief statements of contents of the letters.

In every way the series, *Johannes Kepler Gesammelte Werke*, can be commended as worthy of the great genius of Kepler.

LOUIS C. KARPINSKI

*An Introduction to the Theory of Functions of a Real Variable.* By S. Verblunsky. Oxford, Clarendon Press, 1939. 11+169 pp. \$4.25.

This text for students and teachers was written for the special purpose of furnishing a more rigorous and accurate treatment of the elements of the theory of functions of a real variable. It is based on notes of lectures delivered by Verblunsky to students in their first year at the University of Manchester. The subject matter is entirely standard, but the treatment involves much that is new and original—ingenious and elegant proofs for certain theorems and new approaches to some parts of the subject. The dominant feature of the book is the presentation of the subject as a body of deductions from specified hypotheses.

The material treated will be sufficiently indicated by the following list of chapter headings: Chapter I, Number; II, Sets and Functions; III, Convergence; IV, Continuity and the Derivative; V, The Elementary Functions; VI, Primitives; VII, Limits and Higher Derivatives; VIII, Integrals; IX, Series. The elementary character of the book should be noted. There is no treatment of the properties of sets