SHORTER NOTICES

Das mathematische Werkzeug des Chemikers, Biologen, Statistikers, und Soziologen. By R. Fueter. Zweite verbesserte und vermehrte Auflage. Zürich and Leipzig, Füssli, 1930. 303 pp.

This book is addressed particularly to students of chemistry, biology, and medicine, with the idea of instructing them in the fundamental concepts of mathematics and the possibility of applications in the natural sciences. It is distinctly not a collection of formulas. The topics covered are differential and integral calculus, statistics, and a brief introduction to differential equations. W. R. LONGLEY

Die Raum-Zeit-Philosophie des 19. Jahrhunderts. By Werner Gent. Bonn, Friedrich Cohen, 1930. xii+397 pp. Price 16 RM.

This volume and the author's earlier work on *Die Philosophie des Raumes und der Zeit* (1926) together give a systematic account of the history of philosophical speculation on space and time from Aristotle to the present day. There seems to be no other work which treats this subject comprehensively. The years 1768–69 mark the dividing line between the two volumes; this is the time at which Kant closed his precritical stage. The later volume is written so that it may be read independently of the earlier; nearly one fourth of it is given to Kant. The treatment of the nineteenth century appears to be quite adequate except for the purposed omission of the investigation of space and time in experimental psychology. A brief chapter is given to the problem of space and time in mathematical physics; but even here there is but little more than an allusion to the mathematical questions involved. The book's chief appeal must lie in its interest to philosophers.

R. D. CARMICHAEL

Komplexe Reihen. By H. Falckenberg. Berlin and Leipzig, de Gruyter, 1931. (Sammlung Göschen, No. 1027.) 140 pp.

This little book is complementary to the author's earlier text entitled *Elementare Reihenlehre* (Sammlung Göschen, No. 943). The first part, consisting of 28 pages, contains an elementary treatment of infinite series with complex terms, a topic omitted from the earlier book because of lack of space. The second part contains a collection of more than 100 problems arranged in groups by topics, with references to the corresponding text in both books. Many of the problems are routine exercises while others contribute appreciably to the theory. In the last group an elementary introduction to the theory of Dirichlet and Lambert series is given through the medium of problems. The third part of the book contains solutions of the problems given in the second part.

This volume provides a valuable convenience to the instructor who wishes problems for class use and it affords excellent material to the student who wishes to test his grasp of the subject matter and to cultivate skill in technique.

W. R. LONGLEY