activities of several houses, among them the Göschen'sche Verlagshand-lung.

The book, grouping its material around the centrally important concept of the monogenic analytic function, affords a very satisfactory brief introduction to the study of the theory of functions of a complex variable. By maintaining throughout sufficient emphasis upon the central concept, and by connecting various parts of the theory by their relation to this concept, a balance that is very desirable in a book of this kind is secured between the more and the less theoretical aspects of the subject. After a chapter on point sets, *Wege* (i.e., curves consisting of a finite number of rectifiable pieces), etc., there are taken up the integral theorems, development in series, analytic continuation and singular points. Then follow, in the second volume, short sections on entire functions, meromorphic functions and periodic functions (with brief mention of the elliptic functions); and finally a section on multiple-valued functions.

The book is clearly written, well printed, and practically free from misprints. The Cauchy integral theorem is proved for a closed *Weg* by means of approximating polygonal lines and by reducing the theorem ultimately to the case in which the area enclosed by the curve is a triangle, in a manner similar to that followed by Jordan in volume I of his *Cours d'Analyse*. A number of well-chosen exercises are distributed throughout the book.

ARNOLD DRESDEN

Réflexions sur la Métaphysique du Calcul Infinitésimal. By Lazare Carnot. I and II. Paris, Gauthier-Villars, 1921.

It is not generally known that this treatise was translated into English by William Dickson and published, with notes, in the PHILOSOPHICAL MAGAZINE of London, volumes 9 and 10, for the years 1800 and 1801. Maurice Solovine, the editor of the present edition, is mistaken when he states that J. K. Hauff's German translation (1800) and G. B. Magistrini's Italian translation (1803) antedated translation into English. To be sure, a later English version, prepared by William Robert Browell, did appear at Oxford in 1832. The various translations bear testimony to the high esteem in which the booklet was held by Carnot's contemporaries. Carnot makes no reference to English mathematicians of the eighteenth century who came after Newton; he was unacquainted with Bishop Berkeley's onslaught as found in the ANALYST. Berkeley and Carnot exerted a strong influence on the development of the philosophy of the calculus: the one by his destructive criticism, the other by his constructive efforts. Carnot lays great stress on the doctrine of the compensation of errors in infinitesimal analysis, being unaware that before him this view-point had been presented by Berkeley and others. While D'Alembert and Lhuilier were partial to the method of limits, Carnot found that method a tortuous foot-path in which it was difficult to avoid being bewildered. Mathematicians interested in the history and philosophy of the calculus will welcome this reprint of the greatly enlarged edition of 1813. It appears in the series of inexpensive editions of *Les Maîtres de la Pensée Scientifique*.

FLORIAN CAJORI