

this more detailed account, the spherical-elliptical geometry is disposed of in one short chapter. The last chapter is on non-euclidean mechanics; and the book is concluded by a few pages in which attention is directed to some of the discussions about the nature of actual space.

E. B. COWLEY.

*A Brief Introduction to the Infinitesimal Calculus.* Designed especially to aid in reading mathematical economics and statistics. By IRVING FISHER, Ph.D., Professor of political economy in Yale University. Second edition. New York and London, The Macmillan Company, 1906. 12mo. xiii + 84 pp. Price, 75 cents.

THIS book gives an excellent bird's-eye view of the differential calculus, and indeed of the integral calculus. It is written with remarkable clearness, the illustrations from geometry, physics and economics being well chosen and well placed. In this, the second edition, the notion of the "little zero" is not used. Its use in the first edition was criticized by Professor Fiske in his review of the book in the *BULLETIN*, February, 1898, page 238.

Though small, the book is very comprehensive. If it were to be enlarged, the first addition would perhaps be an article on the mean value theorem, of which article 69 is suggestive, and a page or two on integration as summation, in place of the two short articles 76, 87. Some footnotes, such as the one inserted in the German edition (Teubner, 1904) for article 35, would add to the logical completeness of the proofs, and a few slight changes might be made in the introductory chapter.

The book contains about 200 well selected problems, and is an admirable text-book. It supplies the need, felt by some, of a text-book for those who wish to become familiar, in a short time, with the fundamental conceptions of the calculus.

EDWARD L. DODD.

*Leçons sur les Fonctions Discontinues.* Par RENÉ BAIRE. Rédigées par A. DENJOY. Paris, Gauthier-Villars, 1905. 8vo. viii + 127 pp.

IN these *Leçons* the Borel series of monographs has given us a work of fundamental importance in a too long neglected field. The interest in discontinuous functions is happily increasing, and finds in this little book a basis for attack and for