lections of theorems relative to inequations, maxima and minima, and continued fractions, together with an eleven-place table of decimal logarithms of the first one hundred and fifty prime numbers (the last one is eight hundred and fifty-nine). The binomial theorem of Newton terminates this part, which concludes with the one hundredth paragraph and the one hundred and thirteenth page of the book.

The first eighteen sections of the part dealing with geometry are taken up with the elements of the simple regular and irregular polygons. The details of the geometry of the circle and the computation of π follow; the series of Wallis, Leibnitz, Brounker, Lacroix, and Bernouilli, and the value of π to one hundred places of decimals are given. The remainder of the third part is devoted to the geometry of space and the sphere, concluding with a concise résumé of the characteristic properties of the conic sections.

The extent of the syllabus of trigonometry, which fills the last forty-two pages of the book, is indicated by the presence of De Moivre's theorem and its corollaries and the elements of the circles associated with a spherical triangle.

The above volume is the two hundred and eightieth number of the scientific series of the collection of manuals now in course of publication by M. Hoepli, of Milan. Up to the present there have been issued six hundred different numbers of these manuals devoted to subjects in science, technology, literature, law, and art. Of the various volumes relating to mathematics the following may be mentioned: Aschieri's analytical geometry, descriptive geometry, and projective geometry; Bagnoli's statics; Cattaneo's thermodynamics; Panizza's practical arithmetic, rational arithmetic, exercises in arithmetic; Pascal's differential calculus, integral calculus, calculus of variations and finite differences, exercises in the infinitesimal calculus, determinants and their applications, elliptic functions, repertorium of higher mathematics; Pincherle's elementary algebra, algebraic analysis, exercises in algebra, elementary geometry, exercises in geometry; Scarpis's theory of numbers; and translations of Ball's mechanics and Lockyer's astronomy.

EDGAR ODELL LOVETT.

Lectures on Elementary Mathematics. By JOSEPH LOUIS LA-GRANGE. Translated by THOMAS J. McCORMACK. Chicago, The Open Court Publishing Company, 1898. xvi + 156 pp.

THE English language is notably deficient in translations into it of standard or classical mathematical works, ancient