We will close now our review regretting its inadequacy to give but a faint idea of the merits of this great work. A classic from the day of its publication, it is destined to a long and useful career, a monument of honor to its genial author.

JAMES PIERPONT.

YALE UNIVERSITY, December, 1897.

SHORTER NOTICES.

Analytic Geometry for Technical Schools and Colleges. By P. A. LAMBERT, M.A., Instructor in Mathematics, Lehigh University. New York, The Macmillan Co., 1897. 8vo, 216 pp. Price, \$1.50.

The volume before us differs greatly in the choice and arrangement of material from the standard English textbooks on analytic geometry, and clearly shows the influence of Briot and Bouquet's "Géométrie Analytique." In the first few pages Cartesian coördinates are defined, and exemplified by curves plotted from tables of statistics. In the second chapter the straight line, the circle, the conic sections, the ellipse, the hyperbola, and the parabola are allotted a paragraph each, and the student is hurried on in Chapter III. to the plotting of algebraic equations, and in Chapter IV. to the plotting of transcendental equations.

The discussion, at this early stage, of the curves represented by the exponential, logarithmic and circular functions, the cycloids, etc., should be of interest to the beginner, and shows the reaction against the undue prominence frequently given to the conic sections in works on elementary geometry. It would be absurd to expect a thorough treatment of the theory of curve-tracing in such limited space, but one or two unnecessarily misleading statements might have been avoided. The tangent is defined as a secant having two points of intersection with the curve "coincident," instead of consecutive, and a similar misuse of terms occurs in defining a point of inflection. The point of inflection is the only singularity discussed, therefore the distinction between the analytical conditions for a point of inflection and a double-point, often a question of some difficulty to the young student, is not touched on.