

J. W. WHIPPLE describes the stability of a bicycle's motion in the March number of the *Quarterly Journal of pure and applied mathematics*.

DR. F. ENGEL has been promoted to the rank of ordinary honorary professor at the University of Leipzig, and Dr. G. SCHEFFERS has received the same title at the Technische Hochschule of Darmstadt. Dr. A. GUTZMER, of Halle, has been made assistant professor of mathematics at the University of Jena.

DR. C. E. ST. JOHN has been elected professor of physics and astronomy in Oberlin College. Dr. M. B. PORTER, of the University of Texas, has been appointed instructor in mathematics at Yale University.

DR. L. E. DICKSON has been promoted to an assistant professorship of mathematics at the University of California.

NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

BAIRE (R.). Sur les fonctions de variables réelles. [Diss.] Milan, Bernardoni de C. Rebeschini, 1899. 4to. 123 pp.

BOHLMANN (G.). Uebersicht über die wichtigsten Lehrbücher der Infinitesimalrechnung (Jahresbericht der Deutschen Mathematiker-Vereinigung, Band VI.).

—See SERRET (J. A.).

BORTOLOTTI (E.). Sulla convergenza degli algoritmi periodici e sulla risoluzione approssimata delle equazioni algebriche. Bologna, Civegli, 1898. 8vo. 13 pp.

BRODÉN (T.). Ueber Grenzwerte der Reihenquotienten. Stockholm, 1897. 8vo. 49 pp. M. 2.40

BUCHHOLZ (A.). Ein Beitrag zur Mannigfaltigkeitslehre. Mannigfaltigkeiten, deren Linienelemente auf die Form

$$ds = f(\sqrt{\sum x_k^2}) \sqrt{\sum dx_k^2}$$

gebracht werden können. Bonn, 1899. 8vo. 6 and 264 pp. M. 7.00
ENGEL (F.). See LOBATSCHESKIJ (N. J.).

FRANZ (C.). Untersuchungen über die lineare homogene Differentialgleichungen zweiter Ordnung der Fuchs'schen Klasse mit drei im Endlichen gelegenen singulären Stellen. [Diss.] Berlin, Mayer and Müller, 1898. 4to. 39 pp. M. 2.00

HARNACK (A.). See SERRET (J. A.).

KORNAKOFF (W.). Deformation of plane surfaces. St. Petersburg, 1898. 8vo. 110 pp. (Russian.) M. 3.00