

PROFESSOR H. POINCARÉ, who held the chair of Calculus of Probabilities and Mathematical Physics in the Paris Faculty of Sciences, has been transferred at his own request to the chair of Mathematical Astronomy and Celestial Mechanics rendered vacant by the death of Professor F. F. Tisserand. Professor Poincaré's successor is Professor V. J. BOUSSINESQ, who has hitherto held the chair of Physical and Experimental Mechanics.

THE tercentenary of the birth of DESCARTES was recently celebrated at Tours. A pilgrimage was made to the house at La Haye in which Descartes was born.

ACCORDING to *Science* a graduate scholarship in mathematics of the annual value of three hundred dollars, has been founded at Cornell University in honor of the late Professor JAMES EDWARD OLIVER.

PROFESSOR E. STUDY has been called from Bonn to a professorship of mathematics at the University of Greifswald.

DR. F. BUKA, professor of geometry at the Technical High School in Berlin, died December 4, 1896, aged forty-five years.

DR. J. A. HUGO GYLDEN, professor of astronomy at the University of Stockholm, died November 9, at the age of fifty-five years.

NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

- ATMANSPACHER (O.). Die Grundlagen unserer Herrschaft über die Zahlen. Leipzig, Dürr, 1896. 8vo. 3 and 52 pp. Mk. 1.00
- BENDT (F.). Katechismus der Differential- und Integralrechnung. Leipzig, Weber, 1896. 12mo. 16 and 268 pp. Mk. 3.00
- BÔCHER (M.). Regular points of linear differential equations of the second order. Cambridge, Harvard University, 1896. 12mo. 24 pp. \$0.50
- CARNOT (L. N.). Réflexions sur la métaphysique du calcul infinitésimal. 5e édition. Paris, Gauthier-Villars, 1896. 8vo. 202 pp.
- FISKE (T. S.). The length of a curved line. (*Science*, new series, Vol. 4, 1896, p. 724).
- GENTRY (R.). On the forms of plane quartic curves. Dissertation presented to the faculty of Bryn Mawr College for the degree of doctor of philosophy. New York, 1896. 8vo. 73 pp., 24 plates. [To be obtained from the author, Vassar College, Poughkeepsie, N. Y.] \$0.50

- GREENHILL (A. G.). Differential and integral calculus, with applications. London, Macmillan, 1896. 8vo. 472 pp. 10s. 6d.
- HURWITZ (A.). Ueber die Kettenbrüche, deren Teilnenner arithmetische Reihen bilden. Zürich (Festschr. Naturf. Ges.), 1896. 8vo. 31 pp. Mk. 2.00
- KOWALEWSKA (S.). Jugenderinnerungen. Deutsche Uebersetzung von L. Flachs. Berlin, 1896. 8vo. 250 pp. Mk. 3.00.
- LING (G. H.). On the solution of a certain differential equation which presents itself in Laplace's kinetic theory of tides. Dissertation submitted in partial fulfillment of the requirements for the degree of doctor of philosophy in the faculty of pure science of Columbia University in the City of New York. (*Annals of Mathematics*, vol. 10, No. 4, April, 1896.) 4to. 31 pp.
- NICHOLSON (J. W.). Elements of the differential and integral calculus. With examples and practical applications. New York, University Publishing Company, 1896. 8vo. 268 pp.

II. ELEMENTARY MATHEMATICS.

- COMBEROUSSE (C. DE). See SERRET (J. A.).
- HÜRZEN (K.). Anfangsgründe der Raumlehre, planmässig dargestellt. Heft 1. Münstereifel, 1896. 8vo. 68 pp. Mk. 1.00
- SERRET (J. A.). *Traité d'arithmétique*. 6e édition, revue et mise en harmonie avec les derniers programmes officiels. A l'usage des candidats aux écoles du gouvernement et au baccalauréat ès sciences. Paris, Gauthier-Villars, 1896. 8vo. 12 and 325 pp. Fr. 4.50
- SERVUS (H.). *Lehrbuch der ebenen Trigonometrie*. Zum Gebrauch an höheren Lehranstalten sowie zum Selbststudium. Berlin, Friedberg und Mode, 1897. 8vo. 4 and 94 pp. Mk. 1.50
- . *Trigonometrisches Nachschlagebuch*. Eine Sammlung trigonometrischer Formeln. (Teil II des Lehrbuches der ebenen Trigonometrie.) Berlin, Friedberg und Mode, 1897. 8vo. 4 and 106 pp. Mk. 2.00
- . *Regeln der Arithmetik und Algebra zum Gebrauche an höheren Lehranstalten sowie zum Selbstunterricht*. Teil I. Untertertia, Obertertia und Untersecunda. Berlin, Salle, 1896. 8vo. 6 and 130 pages. Mk. 1.40

III. APPLIED MATHEMATICS.

- AIRY (G. B.). *Autobiography of Sir George Biddell Airy, K.C.B., M.A., LL.D., D.C.L., F.R.S., F.R.A.S., Honorary Fellow of Trinity College, Cambridge, Astronomer Royal from 1836 to 1881*. Edited by W. Airy. With Portrait. London and New York, 1896. 8vo. 12 and 414 pp. Cloth. \$3.00.
- ASCHIERI (F.). *Geometria descrittiva*. 2a edizione, rifatta. Milano, Hoepli, 1897. 16mo. 6 and 222 pp.
- BOCQUET (J. A.). *Cours élémentaire de mécanique appliquée, à l'usage des écoles primaires supérieures, des écoles professionnelles, etc.* 3e édition. Paris, Baudry, 1896. 18mo. 7 and 450 pp.
- BOUSSINESQ (J.). *Théorie de l'écoulement tourbillonnant et tumultueux des liquides dans les lits rectilignes à grande section*. Paris, 1896. 4to. 6 and 64 pp. Fr. 3.00

- EMTAGE (W. T. A.). Light. (Longmans' advanced science manuals.)
London, Longmans, 1896. 8vo. 360 pp. 6s.
- KAPP (G.). Transformers for single and multiphase currents. A treatise on their theory, construction and use. Translated from the German by the author. New York, Macmillan, 1896. 12mo. 12 and 241 pp. Cloth. \$1.75
- LEHMANN (O.). See MÜLLER (J.).
- MACH (E.). Die Principien der Wärmelehre, historisch-kritisch entwickelt. Leipzig, Barth, 1896. 8vo. 8 and 472 pp. 6 portraits. Mk. 10.00
- MÜLLER (J.). Grundriss der Physik, mit besonderer Berücksichtigung der Molekularphysik, Elektrotechnik und Meteorologie. 14te, völlig umgearbeitete Auflage, von O. Lehmann. Braunschweig, Vieweg, 1896. 8vo. 24 and 820 pp., 2 plates. Mk. 7.50
- VALENTINER (W.). Handwörterbuch der Astronomie. Vol. I. (Encyclopädie der Naturwissenschaften.) Breslau, Trewendt, 1896. 8vo. 14 and 839 pp. Mk. 24.00
- WOLFER (A.). Zur Bestimmung der Rotationszeit der Sonne. Zürich, 1896. 8vo. 15 pp., 1 plate. Mk. 1.50