two hours.—By Professor A. Voss: Analytical mechanics, four hours; Exercises in analytical mechanics, two hours; Algebra, three hours; Seminar in synthetic and analytic geometry, one hour.

University of Zurich. By Professor H. Burkhardt: Differential and integral calculus, four hours; mechanics, four hours; Seminar, two hours.—By Dr. A. Weiler: Descriptive geometry and exercises, four hours; Analytical geometry and exercises, four hours.—By Dr. F. Kraft: Differential equations, three hours; Analytical geometry, three hours; Theory of probabilities, two hours; Seminar, two hours.—By Dr. E. Gubler, algebra, three hours; spherical trigonometry, one hour; methods of mathematical instruction, two hours.

Andrew Gray, F.R.S., professor of physics in the University of North Wales since 1884, has been appointed professor of natural philosophy in Glasgow University, to succeed Lord Kelvin, who recently resigned.

A STATUE erected in memory of the late Professor F. Tisserand was unveiled at Nuits-Saint-Georges on the 15th of October.

Mr. Lindsay Duncan has been appointed instructor in mathematics at Union College, and Mr. Edwin Haviland has been made assistant in mathematics in Swarthmore College.

## NEW PUBLICATIONS.

## I. HIGHER MATHEMATICS.

BURKHARDT (H.). See ENCYKLOPÄDIE.

BURNSIDE (W. S.) and PANTON (A. W.). Introduction to determinants; being a chapter from the theory of equations. London, Longmans, 1899. 8vo. 2s. 6d.

—. Theory of equations. 4th edition. Vol. I. London, Longmans, 1899. 8vo. 9s. 6d.

CAPELLI (A.). Lezioni di algebra complementare, ad uso degli aspiranti alla licenza universitaria in scienze fisiche e matematiche. 2a edizione con aggiunte. Napoli, Pellerano, 1898. 8vo. 16 + 680 pp.

Fr. 8 50

CORDARA (S.). Nota sulla impossibilità della quadratura del cerchio. Bologna, Azzoguidi, 1899. 8vo. 11 pp.