

Professor Voroshilov, devotes his inaugural address to a sketch of the remarkable pedagogic and administrative activity of Lobachevsky, who for nineteen years (1827 to 1846) held the office of president of the university; Professor Vasiliev's paper, the most interesting of all, is a succinct account of Lobachevsky's life. An English translation of this biography was recently published by Professor G. B. Halsted, of the University of Texas.

A. Z.

 NOTES.

A REGULAR meeting of the AMERICAN MATHEMATICAL SOCIETY was held Saturday afternoon, January 26, at three o'clock, the president, Dr. Hill, in the chair. There were ten members present. On the recommendation of the council, Professor Irving Fisher, of Yale University, New Haven, and Mr. William A. Freedman, of Columbia College, New York, nominated at the preceding meeting, were elected to membership. Six nominations for membership were received. The following papers were presented:

- (1) "The principles of differentiation in space-analysis," by Professor A. MACFARLANE.
- (2) "Apolar triangles on a conic," by Professor F. MORLEY.
- (3) "The group of automorphic transformations of a bilinear form," by Professor H. TABER.

PROFESSOR CAYLEY died at Cambridge, England, on January 26, at the age of seventy-four years.

ON the 17th of December the annual award of prizes took place at the French Academy. Dr. JULIUS WEINGARTEN, professor of mechanics in the Charlottenburg Polytechnic School, received the grand prix de mathématiques, honorable mention being accorded to C. GUICHARD, professor of mechanics in the Faculty of Sciences at Clermont-Ferrand. The subject set by the Academy for this prize was: to advance in some important respect the theory of the deformation of surfaces.

The Bordin prize (to study the problems of theoretical mechanics admitting integrals algebraic in the velocities, especially quadratic integrals) was awarded to PAUL PAINLEVÉ of the Sorbonne, LIOUVILLE and ELLIOT receiving honorable mention.

The Francœur prize was given to J. COLLET; the Poncelet prize to H. LAURENT, for the whole of his mathematical works; the Dalmont prize to AUTONNE and MAURICE D'OCAGNE, with honorable mention to POCHE and WILLOTTE.

Professor GEORGE A. HALE, of Chicago, was awarded the Janssen gold medal for his work in physical astronomy; Admiral JAVELLE received the Lalande prize for his observations of nebulæ; M. CONIEL, the Valz prize for various astronomical labors. The Damoiseau prize (to perfect the methods for computing the perturbations of the smaller planets, etc.) was given to Dr. M. BRENDEL, of Greifswald.

The subjects set by the French Academy for the next mathematical prizes are as follows: *grand prix* (Oct. 1, 1895), to advance in some important respect the algebraic theory of groups of substitutions of n letters; *prix Bordin* (Oct. 1, 1895), to advance in some important respect the theory of geodesic lines, the case of a linear element with any number of variables not being excluded by the Academy; *prix Damoiseau* (June 1, 1896), to connect, by means of the theory of perturbations, the different apparitions of Halley's comet, going back to Toscanelli's observations in 1456 and taking into account the attraction of Neptune, and to calculate with precision the next return of this comet in 1910; *prix Damoiseau* (June 1, 1898), to give an exposition of the theory of the perturbations of Saturn's satellite Hyperion, discovered in 1848 simultaneously by Bond and Lassell, taking into account principally the action of Titan, to compare the observations with the theory, and to deduce therefrom the value of the mass of Titan.

THE meeting of the American Association for the Advancement of Science will be held this summer at Springfield, Mass. The general sessions will begin on Thursday morning, August 29, at ten o'clock.

THE University of Göttingen has called Professor D. Hilbert from Königsberg to succeed to the professorship of mathematics vacated by Professor H. Weber, who was recently called to Strassburg.

A graduate student at Clark University, Mr. H. G. Keppel, is taking a series of photographs of the mathematical models and portraits of mathematicians to which he has access. It will include stereoscopic views of about one hundred different models. Among the portraits already photographed are likenesses of Sophie Kovalevsky, Gauss, Abel, Euler, Newton, Laplace, Lagrange, John Bernoulli, Borchardt, Kronecker, Cayley, Benjamin Peirce, Kummer, Steiner, Monge, Lobachevsky, Bessel, Abbé Moigno, Möbius, Fourier, Fermat, Jacobi, De Morgan, Galileo, Huygens, Lambert, Dirichlet, Pascal, Galois, Montucla, Lalande, Kepler, Arago, Tycho Brahe. Applications for copies of Mr. Keppel's pictures may be addressed to him and will receive his attention.