

CORRECTION.

IN our note on "Conics touching the line infinity at one of the circular points," page 122 of the current volume of the BULLETIN, all four foci of the conic are said to coincide with J . As a matter of fact, however, only two of the foci are at J , the other two coinciding with I . This correction involves several slight changes in the wording of the rest of the paper.

E. V. HUNTINGTON,
J. K. WHITTEMORE.

June 3, 1902.

NOTES.

THE Librarian acknowledges the gift to the AMERICAN MATHEMATICAL SOCIETY of one volume presented by Gauthier-Villars, Paris, and one by the Syndics of the University Press, Cambridge, England.

AT the regular meeting of the London mathematical society held on April 10, 1902, the following papers were read: "On divergent series," by Dr. E. W. HOBSON, the president; "Stress and strain in two-dimensional elastic systems," by Professor A. E. H. LOVE; "Further applications of matrix notation to integration problems," by Dr. H. F. BAKER (by title); "On the convergence of series which represent a potential," by Professor T. J. I. BROWNE (by title); "On the groups defined for an arbitrary field by the multiplication tables of certain finite groups," by Professor L. E. DICKSON (by title). At the meeting May 8, papers were read by Professor W. BURNSIDE on "Groups in which every two conjugate operations are permutable;" by Mr. A. E. WESTERN on "Fermat's theorem on binary powers;" by Mr. H. S. CARSLAW on "The application of contour integration to the solution of problems in the theory of conduction of heat, and to the development of an arbitrary function in series;" by Dr. G. PRASAD on "The use of Fourier's series in the theory of conduction of heat;" and by Dr. F. S. MACAULAY on "Some formulæ in elimination."

AT the meeting of the Edinburgh mathematical society on May 9th, the following papers were read: "Note on the theorems of Menelaus and Ceva," by Dr. J. S. MACKAY; "Notes on decimal coinage and approximation," by Mr.

BUTTERS; "On some systems of conics associated with the triangle," by Professor R. E. ALLARDICE; "The applicability of the law of extensible minors to determinants of special form, by Dr. THOMAS MUIR.

At the meeting of the Berlin mathematical society on February 26, papers were read by Dr. A. ADLER on "The theory of drawing instruments," and by Dr. G. WALLENBERG on "The theory of differential equations of the first order." At the meeting on March 19 papers were read by Professor G. HAUCK on "Infinite projection," and by Professor K. HENSEL on "Algebraic numbers and analytic functions."

THE next general meeting of the British mathematical association will be held at King's College, London, on October 2, 1902.

JOHNS HOPKINS UNIVERSITY.—The following mathematical courses are announced for the academic year 1902-1903:—By Professor F. MORLEY: Geometry (advanced course), three hours; Theory of groups, two hours, first semester; Theory of functions (advanced course), two hours, second semester; Mathematical seminary, one hour. By Dr. A. COHEN: Lie's theory of differential equations, two hours; Differential geometry, two hours; Elementary theory of functions, two hours; Differential equations, two hours.—By Professor L. S. HULBURT: Projective geometry, four hours; Analytic geometry of three dimensions.

UNIVERSITY OF PARIS.—The following mathematical courses are announced by the Faculty of Sciences for the academic year, 1902-1903:

First semester.—By Professor G. DARBOUX: General principles of infinitesimal geometry.—By Professor E. GOURSAT: Definite integrals and analytic functions.—By Professor P. APPELL: General laws of equilibrium and motion.—By Professor H. POINCARÉ: Theory of tides.—By Professor J. BOUSSINESQ: Theory of undulatory phenomena.—By Professor G. KOENIGS: Kinematics of solid bodies; graphical statics and reciprocal figures; principles of the theory of elasticity.—By Professor BOUTY: Optics.—By Professor H. PELLAT: Thermodynamics.—By Professor L. RAFFY: Principal mathematical theories introductory to courses in science.—By Professor H. ANDOYER: Mo-

tion of rotation of celestial bodies about their centers of gravity.

Second semester.—By Professor E. PICARD : Partial differential equations from the point of view of mathematical physics.—By Professor E. GOURSAT : Differential equations.—By Professor P. APPELL : General laws of motion of systems ; analytical mechanics ; hydrostatics ; hydrodynamics.—By Professor WOLF : Subjects of programme of certificate in astronomy.—By Professor J. BOUSSINESQ : Theory of unidulatory phenomena.—By Professor G. KOENIGS : Principles of the resistance of materials ; application of theoretical kinematics to the study of machines.

Conferences will be conducted each semester by Professors L. RAFFY, J. HADAMARD and P. PUISEUX on the programmes for certificates in higher geometry, infinitesimal calculus, and rational mechanics, respectively.

THE Holland scientific society of Haarlem proposes as the subject for its prize of 1903 the investigation of Japanese mathematics of the middle of the seventeenth century. The subject is particularly interesting to the Dutch nation, since the unusual development of the science in Japan at that time may possibly have been due to influences emanating from Holland.

THE Société scientifique of Brussels announces for its prize competition for 1902 the following topic : To make a critical study of the works of Simon Stevin on mechanics, comparing them with those of Galileo, Pascal and other scientists of the same period.

THE collected physical papers of the late Professor HENRY A. ROWLAND are soon to be published by Johns Hopkins University. The committee of publication consists of President Ira Remsen and Professors W. H. Welch and J. S. Ames.

GINN & Co. announce as in preparation a new edition, to contain about twice as many pages as the last, of The mathematical theory of the Newtonian potential function by Professor B. O. PEIRCE, of Harvard University.

AN encyclopedia of elementary mathematics, in two volumes, by Professor H. WEBER and Dr. J. WELLSTEIN, is announced as in preparation. The work is intended for teachers, and is designed to lay substantial foundations for the elements rather than to enlarge their boundaries.

DR. J. WELLSTEIN, of Strassburg, has been called to the University of Giessen as associate professor of mathematics.

DR. KARL ZSIGMONDY has been made associate professor of mathematics in the Technical High School of Vienna.

PROFESSOR A. C. DIXON has been made professor of mathematics in Queen's College, Belfast.

DR. A. WIMAN has been called from Lund to a professorship of mathematics in the University of Upsala.

PROFESSOR W. H. METZLER, of Syracuse University, has been made a Fellow of the Royal Society of Edinburgh.

MR. H. L. RIETZ, of Cornell University, has been appointed professor of mathematics at Butler College, Irvington, Ind.

DR. A. B. COBLE, of Johns Hopkins University, has been appointed instructor in mathematics at the University of Missouri.

At the Massachusetts Institute of Technology, the following changes are announced :—Professor JOHN D. RUNKLE, Walker professor of mathematics and senior member of the faculty, also president of the Institute, 1870 to 1878, has been appointed professor emeritus. Dr. C. N. HASKINS has been appointed instructor in mathematics.

PROFESSOR I. L. FUCHS, since 1884 professor of mathematics in the University of Berlin, and of late editor of *Crelle's Journal*, died on April 26, at the age of sixty-eight years.

THE following catalogues of second-hand mathematical books have been received : Mayer and Müller, Prinz Louis Ferdinandstrasse 2, Berlin, fifteen page catalogue of modern works ; A. Hermann, 8 Rue de la Sorbonne, Paris, catalogue No. 75, including over two thousand titles of works from the library of the late JOSEPH BERTRAND.