

NOTES.

THE opening (January) number of Volume III. of the *Transactions* of the AMERICAN MATHEMATICAL SOCIETY contains the following papers: "On a class of automorphic functions," by J. I. HUTCHINSON; "Concerning the existence of surfaces capable of conformal representation upon the plane in such a manner that geodesic lines are represented by a prescribed system of curves," by H. F. STECKER; "Zur Erklärung der Bogenlänge und des Inhaltes einer krummen Fläche," by O. STOLZ; "The groups of Steiner in problems of contact," by L. E. DICKSON; "Quaternion space," by A. S. HATHAWAY; "Reciprocal systems of linear differential equations," by E. J. WILCZYNSKI; "On the invariants of quadratic differential forms," by C. N. HASKINS; "The second variation of a definite integral when one end-point is variable," by G. A. BLISS; "On the nature and use of the functions employed in the recognition of quadratic residues," by E. McCLINTOCK; "A determination of the number of real and imaginary roots of the hypergeometric series," by E. B. VAN VLECK; "On the projective axioms of geometry," by E. H. MOORE.

THE first meeting of the Berlin mathematical society was held on October 31, 1901. Papers were presented by Weingarten, Kneser, Jahnke, Lampe, Landau, Kötter, Heun, and Hermes. Professor J. Weingarten is president, and Professor A. Kneser and Dr. E. Jahnke the secretaries of the society, which has at present about sixty members. Meetings of the society are held monthly. At the meeting of November 27 the following papers were read: Professor E. LAMPE: "Ueber eine Frage des geometrischen Mittelwertes;" Dr. E. JAHNKE: "Ueber Lemoine's Bestimmung der Axenrichtungen eines Kegelschnitts;" Dr. E. LANDAU: "Ueber den casus irreductibilis bei kubischen Gleichungen."

THE preliminary programme of the December meeting of the London mathematical society announced papers by Dr. E. W. HOBSON, on "Non-uniform convergence and the integration of series," and by Mr. J. H. MICHELL, on the "Flexure of a circular plate."

AMONG the papers announced for the December meeting of the Royal astronomical society of London was one descriptive of the manuscripts of Adams on the perturbations of Uranus, by Mr. R. A. SAMPSON.