

NOTES.

THE concluding (October) number of volume 17 of the *Transactions of the American Mathematical Society* contains the following papers: "On the invariant system of a pair of connexes," by O. E. GLENN; "Algebraic properties of self-adjoint systems," by DUNHAM JACKSON; "On the second derivatives of an extremal-integral with an application to a problem with variable end points," by ARNOLD DRESDEN; "Deformable transformations of Ribaucour," by L. P. EISENHART; "Jacobi's condition for the problem of Lagrange in the calculus of variations," by D. M. SMITH; "On transcendental numbers," by A. J. KEMPNER; "The linear dependance of functions of several variables, and completely integrable systems of homogeneous linear partial differential equations," by G. M. GREEN; "On the factorization of expressions of various types," by HENRY BLUMBERG; "The formal modular invariant theory of binary quantics," by O. E. GLENN.

THE May, June, September and October numbers of the *Proceedings of the National Academy of Sciences* contain the following mathematical papers: "On the foundations of plane analysis situs," by R. L. MOORE; "A general theory of surfaces," by E. B. WILSON and C. L. E. MOORE; "Theory of an aeroplane encountering gusts," by E. B. WILSON; "Differential equations and implicit functions in infinitely many variables," by W. L. HART; "Note on Lucas' theorem," by M. B. PORTER; "A variable system of sevens on two twisted cubic curves," by H. S. WHITE; "A proof of White's porism," by A. B. COBLE; "On certain asymptotic expressions in the theory of linear differential equations," by W. E. MILNE; "On Newton's method of approximation," by H. B. FINE; "Point sets and cremona groups. Part III," by A. B. COBLE; "Some problems of diophantine approximation: a remarkable trigonometrical series," by G. H. HARDY and J. E. LITTLEWOOD; "Newton's method in general analysis," by A. A. BENNETT.

THE Hamburg mathematical society recently decided not to celebrate its two hundred and twenty-fifth anniversary, on account of the war. The society had in 1915 a membership

of 121, including 21 foreign and 9 honorary members. Of these 49 were serving in the army.

AT Queen's University, Kingston, Ontario, Dr. DANIEL BUCHANAN has been promoted from an associate professorship of mathematics to the professorship of astronomy and mathematics.

AT Washington University, Dr. W. H. ROEVER has been promoted to an associate professorship of mathematics, and Dr. G. O. JAMES to an associate professorship of astronomy and mechanics.

AT Lafayette College Dr. W. M. SMITH has been promoted to a full professorship of mathematics.

AT the University of Arizona Professor H. B. LEONARD, of the University of Oregon, has been appointed professor of mathematics. Assistant professor G. H. CRESSE has been promoted to an associate professorship of mathematics.

AT the University of Oregon assistant professor R. M. WINGER has been promoted to a full professorship of mathematics.

DR. J. K. LAMOND, of Wesleyan University, has been appointed professor of mathematics in Pennsylvania College.

AT the University of Pennsylvania Dr. R. L. MOORE has been promoted to an assistant professorship of mathematics.

AT the University of Illinois Dr. A. R. CRATHORNE has been promoted to an assistant professorship of mathematics.

AT Purdue University Drs. W. V. LOVITT and T. E. MASON have been promoted to assistant professorships of mathematics.

DR. W. E. MILNE, of Bowdoin College, has been promoted to an assistant professorship of mathematics.

MR. H. W. MYERS has been appointed professor of mathematics in Huron College.

MR. F. L. SMITH has been appointed instructor in mathematics at Princeton University.

THE death is announced of Professor EVA S. MAGLOTT, who had held the chair of mathematics in Ohio Northern University for the past thirty-two years.

PROFESSOR CLEVELAND ABBE, of the U. S. Weather Bureau, died October 28 at the age of seventy-eight years. Professor Abbe was a member of the American Mathematical Society from 1892 to 1914.

PROFESSOR A. G. SMITH, head of the department of mathematics and astronomy in the University of Iowa died November 5 at the age of forty-eight years.

BOOK catalogues:—Galloway and Porter, Cambridge, England, catalogue 82, mathematical and physical books, about 680 entries.—G. E. Stechert and Company, 151 West 125th Street, New York, Sets of mathematical periodicals, 42 entries.

NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

- ANGELESCO (A.). Sur des polynomes généralisant les polynomes de Legendre et d'Hermite et sur le calcul approché des intégrales multiples. (Thèse.) Paris, Gauthier-Villars, 1916. 4to. 3 + 141 pp.
- BAHIER (E.). Recherche méthodique et propriétés des triangles et rectangles en nombres entiers. Paris, Hermann, 1916. 8vo. 7 + 266 pp. Fr. 8.50
- CAJORI (F.). William Oughtred. Chicago, Open Court, 1916. 8vo. 114 pp. \$1.00
- CARSLAW (H. S.). Elements of non-euclidean plane geometry and trigonometry. London, Longmans, 1916. 8vo. 12 + 179 pp. 5s.
- CHEMIN (O.). See PETERSEN (J.).
- GIRAUD (G.). Sur une classe de groupes discontinus de transformations birationnelles quadratiques et sur les fonctions de trois variables indépendants restant invariables par ces transformations. (Thèse.) Paris, Gauthier-Villars, 1916. 4to. 8 + 169 pp.
- GLOBA-MIKHAILENKO (B.). Sur quelques nouvelles figures d'équilibre d'une masse fluide en rotation. (Thèse.) Paris, Gauthier-Villars, 1916. 4to. 3 + 79 pp.