## NOTES.

The March number (series 2, volume 17, number 3) of the Annals of Mathematics contains the following papers: "An isomorphism between theta characteristics and the ( $2 p+2$ )point," by A. B. Coble; "On certain real solutions of Babbage's functional equation," by J. F. Ritt; "Note on the preceding paper," by A. A. Bennett; "An elementary exposition of the theory of the gamma function" (authorized translation from the Danish by T. H. Gronwall), by J. L. W. V. Jensen.

The first four numbers of volume two of the Proceedings of the National Academy of Sciences contain: "Upper limit of the degree of transitivity of a substitution group," by G. A. Miller; "An extension of Feuerbach's theorem," by Frank Morley; "Deformations of transformations of Ribaucour," by L. P. Eisenhart; "On the linear dependence of functions of several variables, and certain completely integrable systems of partial differential equations," by G. M. Green; "Point sets and allied Cremona groups (part II)," by A. B. Coble; "On a theorem of Lucas," by M. B. Porter; "Interpretation of the simplest integral invariant of projective geometry," by E. J. Wilczynski.

University of Chicago.-The following courses are announced for the summer quarter, June 19-September 1: By Professor G. A. Bliss: Theory of functions of a real variable.-By Professor L. E. Dickson: Substitution groups and algebraic equations, solution of numerical equations (first half); Determinants and symmetric functions (second half).By Dr. C. R. Dines (of Dartmouth College): Differential equations.-By Professor W. D. MacMillan: Introduction to celestial mechanics.-By Professor E. H. Moore: Integral equations in general analysis (first half); Limits (second half). -By Professor F. R. Moulton: Theory of functions of infinitely many variables (second half); Series (second half). -By Professor A. Ranum (of Cornell University): Metric differential geometry.-By Professor H. E. Slaught: Elliptic integrals.-By Professor J. W. A. Young: Selected topics in mathematics.

