## NOTES.

At the Pittsburgh meeting of the American association for the advancement of science, assistant professor G. D. Birkhoff, of Harvard University, was elected vice-president of Section A, and Professor F. R. Moulton, of the University of Chicago, was reelected secretary of the Section.

The March number (series 2, volume 19, number 3) of the Annals of Mathematics contains the following papers: "Comparison theorems for homogeneous linear differential equations of general order," by R. D. Carmichael; "Note on a substitute for Duhamel's theorem," by H. B. Fine; "Some properties of a straight line and circle and their associated parabolas," by J. H. Weaver; "Motions in hyperspace," by C. L. E. Moore; "A definition of sense on closed curves in nonmetrical plane analysis situs," by J. R. Kline; "Covariant expansion of a modular form," by O. E. Glenn; "The intersections of a straight line and hyperquadric," by G. M. Green; "Numerical functions of [x]," by E. T. Bell; "Surfaces which can be generated in more than one way by the motion of an invariable curve," by L. P. Eisenhart.

The following mathematical papers appeared in volume 52 (1916–1917) of the *Proceedings of the American Academy of Arts and Sciences:* "Differential geometry of two-dimensional surfaces in hyperspace," by E. B. Wilson and C. L. E. Moore, number 6, pages 267–368; "A classification of quadratic vectors," by F. L. Hitchcock, number 7, pages 369–454.

At the meeting of the London mathematical society held January 17, 1918, the following papers were read: By P. A. MacMahon, "A method for studying any convergent series"; by G. H. Hardy, "Additional note on Dirichlet's division problem"; by J. H. Grace, "Note on a Diophantine approximation"; by K. A. Rau, "A note on a theorem of Mr. Hardy's"; by C. H. Forsyth, "Supernormal curves"; by H. Hilton and Miss D. S. Tuck, "Plane quartic curves with a tacnode."