

projection along a bisecant and along a tangent are clearly explained, also from a point in the osculating plane. Cones and developables, together with their curves of intersection, ruled surfaces and helicoids complete the volume.

The presentation is too concise for a first reading, but the volume is not meant for this purpose. It is rather for the teacher who already knows something of the various methods and wishes to know their mutual relations. At the end of each chapter a generous list of books and monographs is given which add greatly to the value of the book. It is a curious fact that not a single American work is mentioned.

VIRGIL SNYDER.

NOTES.

THE December number (volume 16, number 2) of the *Annals of Mathematics* contains the following papers: "A substitute for Duhamel's theorem," by G. A. BLISS; "The points of inflexion of a plane cubic curve," by L. E. DICKSON; "Properties of four confocal parabolas whose vertical tangents form a square," by C. M. HERBERT; "Some remarks on conformal representation," by T. H. GRONWALL; "On the maximum modulus of an analytic function," by T. H. GRONWALL; "Note on the simple difference equation," by J. H. M. WEDDERBURN; "Note on the rank of a symmetrical matrix. II," by J. H. M. WEDDERBURN.

AT the Philadelphia meeting of the American association for the advancement of science Professor W. W. CAMPBELL was elected president, and Dr. L. O. HOWARD was reelected permanent secretary for a term of five years. Professor A. O. LEUSCHNER was elected vice-president of Section A. The Association will hold a summer meeting at San Francisco, August 2-7, and a winter meeting at Columbus, Ohio, next December. A convocation week meeting will be held in New York City in 1916-1917.

THE Paris academy of sciences announces the following prize problems. The Bordin prize (3,000 fr.) for 1915 for a noteworthy contribution to the theory of curves of constant torsion, in particular of algebraic curves, with special emphasis