was felt, are distant 1500 miles from this point. The shock would appear to have reached IX. of the R. F. scale, at the center. It will be interesting to learn how far this side the center, any sensations were noticed. The delicate indications of a fine telescope, poised over the mercury, will fill in the gap between the borders of the sensible shock, and the far extent of the real disturbance of the earth's crust.

R. H. TUCKER.

LICK OBSERVATORY, UNIVERSITY OF CALIFORNIA,
Jan. 24, 1900.

NOTE.—The thirty-six-inch and twelve-inch refractors and the Crossley reflector were in use while the oscillations of the earth, recorded by Professor Tucker, were taking place, but no unusual disturbances of these instruments were noticed. The observers were not, however, aware of the disturbance of the mercury under the meridian circle.

J. E. K.

THE CHICAGO SECTION OF THE AMERICAN MATHEMATICAL SOCIETY.

THE Section held its sixth semi-annual meeting at the University of Chicago on Thursday and Friday, December 28 and 29, 1899. Four sessions, two on each day, were fully occupied with the presentation and discussion of papers. Professor Moore, Vice-President of the Society, occupied the chair during the first session, after which Professor E. W. Davis presided.

The following papers were read:

(1) MR. R. E. MORITZ, University of Nebraska: 'A generalization of the process of differentiation.'

(2) PROFESSOR E. D. ROE, Elmira, N. Y.: 'On the transcendental form of the resultant.'

(3) DR. E. J. WILCZYNSKI, University of California: 'An application of Lie's theory to hydrodynamics.'

(4) DR. F. R. MOULTON, University of Chicago: (1) On the question of the stability of certain particular solutions of the problem of four bodies; (2) Particular solutions of the problem of n bodies of the Lagrangian type.

(5) PROFESSOR L. E. DICKSON, University of Texas: 'The canonical form of linear homogeneous substitutions in a general Galois field; (2) The cyclic sub-group of the simple group of linear fractional substitutions of determinant unity in two non-homogeneous variables with coefficients in an arbitrary Galois field.

(6) DR. J. V. WESTFALL, University of Iowa: 'On a category of transformation groups in space of four dimensions.'

(7) PROFESSOR O. BOLZA, University of Chicago: 'The elliptic sigma-functions considered as a special case of the hyperelliptic sigma-functions.

(8) PROFESSOR ALEXANDER PELL, University of South Dakota: Calculation of the integral

$$\int e^{-\left(px^2+\frac{q}{x^2}\right)} \begin{matrix}\sin\\ \cos\end{matrix} \left\{ rx^2+\frac{s}{x^2} \right\} dx.$$

(9) PROFESSOR JOHN A. MILLER, Indiana University: 'Concerning certain elliptic modular functions of square rank.'

(10) PROFESSOR ROBERT J. ALEY, Indiana University: 'A new collinear set of three points connected with the triangle.'

(11) PROFESSOR H. MASCHKE, University of Chicago: 'Note on the unilateral surface of Moebius.'

(12) PROFESSOR C. A. WALDO, Purdue University: 'On a family of warped surfaces connected by a simple functional relation.'

(13) PROFESSOR Henry S. WHITE, Northwestern University: 'Plane cubics and irrational covariant cubics.'

After the papers listed above had been read there followed a general discussion on the topic 'Limits of function of one or more variables' introduced by Professor Moore.

The program committee for the following year was elected at this meeting and will consist of the Secretary *ex-officio*, Professor H. B. Newson, University of Kansas, and Professor C. A. Waldo, Purdue University.

The next meeting of the Section will be held on Saturday, April 14, 1900, at Northwestern University, Evanston.

THOMAS F. HOLGATE,
Secretary of the Section.

EVANSTON, ILLINOIS.
Jan. 6, 1900.