THE FORTY-EIGHTH REGULAR MEETING OF THE SAN FRANCISCO SECTION

The forty-eighth regular meeting of the San Francisco Section of the Society was held at Stanford University on Saturday, April 3, 1926. The Chairman, Professor Blichfeldt, presided. The total attendance was twenty-nine, including the following twenty-three members of the Society:

Barter, Bernstein, Blichfeldt, Buck, Cajori, Corbin, Daus, Fenner, R. L. Green, E. R. Hedrick, Hoskins, Hotelling, Sophia Levy, Libby, E. K. W. McDonald, J. H. McDonald, W. A. Manning, Moreno, F. R. Morris, Noble, Pehrson, Stager, Wong.

The Secretary read letters from Professors Bell and Carpenter of the University of Washington extending a cordial invitation to the members to be present at the regular meeting of the Section in Seattle on June 12. It was decided to hold the next Spring meeting at Stanford University, April 2, 1927.

Titles and abstracts of papers read at the meeting follow. The papers of Professor Carpenter and Mr. Cramlet were read by title.

1. Professor Florian Cajori: *Early "proofs" of the impossibility of a fourth dimension of space.*

The author cites early proofs of the impossibility of four-space given by Ptolemy, Clavius, Leibniz, Kant, Mellin and Whewell. Of these the Clavius-Mellin proof was the only one elaborated by the authors in detail; it was based upon theorems in Euclid's *Elements*, but one of those theorems was given a generality not contemplated by Euclid.

2. Professor A. F. Carpenter: *Triads of ruled surfaces.*

This paper sets up the defining system of differential equations for the projective differential geometry of a configuration of three ruled surfaces whose elements correspond in sets of three, one from each surface. A number of invariants and covariants are obtained and their geometric interpretations given.

3. Mr. C. M. Cramlet: *A determination of all invariant tensors.*