

③. The vertex and any other three points (in general position) of a characteristic surface uniquely determine the surface. A characteristic curve through the vertex and two other points of the surface lies completely on the surface.

F. N. COLE,  
*Secretary.*

### THE TWENTY-THIRD REGULAR MEETING OF THE SAN FRANCISCO SECTION.

THE twenty-third regular meeting of the San Francisco Section of the Society was held at the University of California, on Saturday, April 12, 1913. The following members of the Society were present:

Mr. B. A. Bernstein, Professor H. F. Blichfeldt, Dr. Thomas Buck, Professor G. C. Edwards, Mr. W. F. Ewing, Professor M. W. Haskell, Professor L. M. Hoskins, Dr. Frank Irwin, Professor D. N. Lehmer, Professor W. A. Manning, Professor H. C. Moreno, Dr. L. I. Neikirk, Professor E. W. Ponzer, Professor T. M. Putnam.

Professor G. C. Edwards presided at both morning and afternoon sessions. It was decided to hold the next regular meeting of the Section at Stanford University, on October 25, 1913.

The following program was presented:

(1) Mr. B. A. BERNSTEIN: "A set of postulates for the algebra of positive rational numbers with zero."

(2) Professor H. F. BLICHFELDT: "On the arithmetic value of quadratic forms."

(3) Dr. L. I. NEIKIRK: "The analytical geometry of functional space."

(4) Professor T. M. PUTNAM: "Concerning the residues of certain sums of powers of integers to a prime modulus."

(5) Dr. H. W. STAGER: "A geometrical transformation, with some applications to certain systems of spheres."

Abstracts of the papers follow below.

1. In volume 3 of the *Transactions*, Professor Huntington gives a set of postulates for the positive rational numbers. By modifying Professor Huntington's set, Mr. Bernstein obtains a complete set of postulates for the algebra of positive rational numbers with zero.