

## SOCIETIES AND ACADEMIES

## THE AMERICAN MATHEMATICAL SOCIETY

THE fifteenth summer meeting of the society was convened at the University of Illinois on Thursday and Friday, September 10-11, 1908. The scientific program occupied a morning and an afternoon session on each day. On Thursday evening a social gathering and dinner at the University Club contributed much to the pleasure of the occasion.

The first session was opened with an address of welcome by Professor E. J. Townsend on behalf of the University of Illinois. In the absence of the president of the society, Professor H. S. White, the chair was occupied by Vice-president Professor G. A. Miller, relieved by Professors E. B. Van Vleck and Ziwet. At the close of the meeting resolutions were adopted expressing the society's appreciation of the generous hospitality of the University of Illinois and its officers.

The total attendance at the various sessions was over fifty, including thirty-eight members of the society. Among the visitors present was Professor Max Abraham, of the University of Göttingen. At the meeting of the council the following persons were elected to membership in the society: Dr. G. G. Chambers, University of Pennsylvania; Dr. G. M. Conwell, Yale University; Mr. F. F. Decker, California Polytechnic School; Professor A. E. Haynes, University of Minnesota; Mr. P. H. Linehan, College of the City of New York; Mr. H. F. MacNeish, University High School, Chicago; Mr. Lewis Omer, High School, Oak Park, Ill.; Professor J. C. Stone, State Normal College, Ypsilanti, Mich. Six applications for membership in the society were received. The total membership is now 598.

The following papers were read at this meeting:

Eduard Study: "Zur Differentialgeometrie der analytischen Curven."

L. E. Dickson: "On definite forms in a finite field."

G. A. Miller: "Answer to a question raised by Cayley as regards a property of abstract groups."

Arnold Dresden: "The second derivatives of the extremal integral."

O. E. Glenn: "On the decomposition of forms into quadratic factors."

Louis Ingold: "On the Kowalewski integral."

L. D. Ames: "A method for the approximate solution of  $n$  equations in  $n$  unknowns."

Oskar Bolza: "Heinrich Maschke: his life and work."

G. A. Bliss and Max Mason: "Fields of extremals in space."

J. B. Shaw: "Qualitative algebra."

Virgil Snyder: "Construction of plane curves of given order and genus having distinct double points."

Arthur Ranum: "The division of riemannian space into congruent parts."

Arthur Ranum: "Parallelopipeds in lobachevskian geometry."

F. L. Griffin: "Families of central orbits related to circular trajectories."

F. R. Sharpe: "The identical relations of the strain and stress components of an elastic solid."

Virgil Snyder: "Surfaces derived from the cubic variety having nine double points in four dimensional space."

L. E. Dickson: "On Fermat's last theorem."

L. E. Dickson: "Rational reduction of two quadratic forms" (preliminary communication).

W. R. Longley: "Note on implicit functions."

E. B. Wilson: "Note on statistical mechanics."

E. J. Wilczynski: "A projective generalization of Meusnier's theorem."

E. R. Hedrick: "On the convergence of the jacobian."

Edward Kasner: "Conformality in connection with functions of two complex variables."

G. A. Miller: "Groups with regard to modular systems."

J. W. Young: "Two-dimensional chains and the classification of complex collineations in a plane (second paper)."

J. H. MacLagan-Wedderburn: "On the direct product in the theory of finite groups."

W. B. Fite: "The class of a group all of whose operations except identity are of order three."

C. N. Moore: "The summability of the developments in Bessel functions, with applications."

E. J. Townsend: "Interchange of order of differentiation."

H. B. Newson: "On characteristic equations."

L. W. Dowling: "The arrangements of the real branches of a plane sextic curve."

C. N. Haskins: "On the second law of the mean."

L. I. Hewes: "Necessary and sufficient conditions that an ordinary differential equation of the first order and  $n$ th degree shall admit a continuous conformal group."

The next meeting of the society falls on Saturday, October 31. The San Francisco section held its fourteenth regular meeting at the University of California on September 26. The southwestern section will meet in the Thanksgiving holidays.

F. N. COLE,  
Secretary