Ash Determinations and Ash Contents of Vegetable Drugs: EDWARD KREMERS and W. H. KENDALL.

The Physiological Assay of the Heart Tonics of the Digitalis Series: E. M. HOUGHTON.

> CHABLES L. PARSONS, Secretary

SOCIETIES AND ACADEMIES

THE AMERICAN MATHEMATICAL SOCIETY

The seventeenth summer meeting of the society was held at Columbia University on Tuesday and Wednesday, September 6-7, 1910, extending through two sessions on each day. Thirty-six members were in attendance. Vice-president Hutchinson occupied the chair. The council announced the election of the following persons to membership in the society: Mr. F. S. Bartlett, General Electric Company, Schenectady, N. Y.; Mr. R. D. Beetle, Dartmouth College; Professor N. C. Grimes, University of Arizona; Professor F. T. H'Doubler, Miami University; Mr. Robert Henderson, Equitable Life Assurance Society, New York, N. Y.; Mr. G. F. McEwen, Stanford University; Professor Josephine A. Robinson, Berea College. Ten applications for membership in the society were received.

On Tuesday evening twenty-five of the members gathered at the usual informal dinner, always a pleasant feature of the meetings.

The following papers were read at the summer meeting:

L. E. Dickson: "On the factorization of integral functions with *p*-adic coefficients."

L. E. Dickson: "Determination of the binary modular groups and their invariants."

O. E. Glenn: "On the structure of p-ary forms."

R. D. Carmichael: "Linear difference equations and their analytic solutions."

H. T. Burgess: "The simultaneous reduction of a quadratic and a bilinear form by the same transformation on both x's and y's."

A. B. Coble: "On the reduction of the sextic equation to the Valentiner form problem."

Virgil Snyder: "The involutorial transformation of the plane, of order 17."

L. E. Dickson: "An invariantive investigation of irreducible binary forms."

Arthur Ranum: "On the classification of systems of linear equations."

Arthur Ranum: "The osculating sphere of a developable surface."

Peter Field: "The theory of degenerate rational plane curves."

J. E. Rowe: "Important covariant curves and a complete system of invariants of the rational quartic curve."

G. D. Birkhoff: "General theory of linear difference equations."

L. E. Dickson: "A fundamental system of invariants of the general modular linear group on m variables."

S. E. Slocum: "A general formula for the shearing deflection of beams of arbitrary cross section, either variable or constant."

G. A. Miller: "Note on the solution of a system of linear equations."

G. A. Miller: "Some relations between substitution group properties and abstract groups."

Jacob Westlund: "On the relative discriminant of a certain Kummer field."

J. W. Bradshaw: "On a method of deriving infinite products from certain infinite series."

Anna J. Pell: "Infinite systems of linear equations with unsymmetric systems of coefficients."

Edward Kasner: "Conformal invariants of curvilinear angles."

Florian Cajori: "Fourier's improvement of the Newton-Raphson method of approximation anticipated by Mourraille."

Louis Ingold: "Note on identities connecting certain integrals."

E. O. Lovett: "Generalizations of certain theorems concerning cases of collisions in the general problem of several bodies."

John Eiesland: "On minimal lines and surfaces in four-dimensional space."

John Eiesland: "Lie's line-sphere geometry from the standpoint of four-dimensional space."

E. D. Roe, Jr.: "A generalized definition of limit."

E. D. Roe, Jr.: "A new invariant function."

H. H. Mitchell: "The subgroups of the hyperorthogonal group HO(3, p^{2k})."

H. Beck: "Ein Seitenstück zur Moebius'schen Geometrie der Kreisverwandtschaften."

Abstracts of the papers will appear in the November number of the *Bulletin*.

The San Francisco section of the society met at the University of California on Saturday, September 24. The next regular meeting of the society occurs on October 29. The winter meeting of the Chicago section will be held at Minneapolis with the American Association.

> F. N. Cole, Secretary