

*Electrical conductivity of ore minerals:* PAUL F. KERR AND CHARLES K. CABEEN.

*A computing and direct reading Jolly balance:* EDWARD H. KRAUS.

*A calcified log from the Pittsburgh coal near Morgantown, West Virginia:* CHARLES R. FETTKER.

*Camsellite from California:* ARTHUR S. EAKLE.

*Foshagite, a new calcium silicate from Crestmore, California:* ARTHUR S. EAKLE.

*Note on the crystallization of thaumasite:* ARTHUR S. EAKLE.

*Preliminary report on the crystal structure of some metallic sulphides:* LEWIS S. RAMSDELL.

*The characteristics of primary calcite in igneous rocks:* T. L. WALKER AND A. L. PARSONS.

*Evanescent pink sodalite, or hackmannite, from near Bancroft, Ontario:* T. L. WALKER AND A. L. PARSONS.

*X-ray diffraction measurements upon the diopside-like pyroxenes and their bearing upon the nature of augite:* R. W. G. WYCKOFF, H. E. MERWIN AND H. S. WASHINGTON.

*The space group of diopside:* R. W. G. WYCKOFF AND H. E. MERWIN.

*The crystallography of sucrose:* A. F. ROGERS.

*An interesting and useful property of zones:* A. F. ROGERS.

*A new type of sand calcite crystals from Monterey County, California:* A. F. ROGERS AND R. D. REED.

*A fulgurite from South Amboy, New Jersey:* W. M. MYERS AND ALBERT B. PECK.

*Rational theory of pairs of bilinear forms in the singular case:* L. E. DICKSON.

*On the solution of diophantine equations by means of ideals:* G. E. WAHLIN.

*Subgroup composed of the substitutions which omit a letter of a transitive group:* G. A. MILLER.

*The transform in the abstract definitions of groups:* W. E. EDINGTON.

*Asymptotic distribution of characteristic numbers in the problem of the elastic bar:* H. T. DAVIS.

*Surface transformations applied to special dynamical problems:* H. BETZ.

*The frequency law of a function of several variables with given frequency laws:* E. L. DODD.

*Note on isogonal trajectories of geodesics:* L. INGOLD.

*The parameter group of a continuous group in function space leaving a manifold invariant:* I. A. BARNETT.

*Existence theorems for differential equations:* H. J. ETTLINGER.

*Polynomials and their residue systems:* A. J. KEMPNER.

*Depreciation and other economic problems involving maxima of functionals:* H. HOTELLING.

*On certain linear algebras:* J. B. SHAW.

The papers by Professors MacNeish, Wahlin, Betz, Dodd and Ettlinger were read by title.

ARNOLD DRESDEN,  
Assistant Secretary

## THE WESTERN MEETING OF THE AMERICAN MATHEMATICAL SOCIETY

THE twenty-second western meeting of the American Mathematical Society was held at the University of Chicago on December 26, 1924. Fifty-two members of the society were present.

It was announced that at the April meeting of the society in Chicago Professor W. D. MacMillan would give a symposium lecture on "Some of the mathematical aspects of cosmology."

At the scientific sessions, presided over by Professor T. H. Hildebrandt, vice-president of the society, the following papers were presented:

*Sense relations between the pairs of corresponding triangles of a Desargues configuration:* F. E. WOOD.

*Bundles and pencils of nets on a surface:* E. P. LANE.

*A theory of a general net on a surface:* V. G. GROVE.

*On the polynomial of the best approximation to a given continuous function:* J. A. SHOHAT.

*The figuratrix in the calculus of variations:* P. R. RIDER.

*Theorems concerning transversals of the  $(n+)$ —hedron in  $n$ —dimensional space:* H. F. MACNEISH.

*A new theory of the rational equivalence of linear transformations or pairs of bilinear form:* L. E. DICKSON.

## MEETING OF THE UTAH ACADEMY OF SCIENCES

A MEETING of the academy was held at the Agricultural College, Logan, on October 31 and November 1, 1924. A brief business session was held at which a number of new members were admitted to membership in the academy. The program consisted of the following papers:

*Acid tolerance of strawberry plants:* LAVAL S. MORRIS.  
*Piracy on the Provo and Weber rivers:* WILLIAM PETERSON.

*Capillary potential in relation to irrigation and drainage:* O. W. ISRAELSON.

*Wheat straw studies:* THOMAS L. MARTIN.

*Some anomalous results in the measurements of capillary potential function by the vapor pressure method:* L. B. LINFORD AND WILLARD GARDNER.

*The precision of the porous cup method of measuring the capillary potential:* WILLARD GARDNER AND C. A. CHAMBERS.

*A new concept of light carrying medium:* LLOYD GARRISON.

*Advantages to be derived from locally developed sugar beet seed:* DEAN A. PACK.

*Contribution to the geology of the southern Wasatch:* MURRAY O. HAYES.

*Sound intensity measurements:* ORIN TUGMAN.

*Occurrence of nematode and crown wart in alfalfa fields in Utah:* B. L. RICHARDS.