which had not been burned recently. The locality was revisited in May and June, during which time there were no more fires, and the salamander hills were gradually settling down and disappearing, no new ones having been made in the interval, apparently.<sup>12</sup> It would be very interesting to know if the related species of the middle northwest, *G. bursarius*,<sup>13</sup> shows a similar reaction to prairie fires. ROLAND M. HARPER

## THE AMERICAN MATHEMATICAL SOCIETY

THE eighteenth winter meeting of the society was held at Columbia University on Wednesday and Thursday, December 27-28, 1911, the program occupying two sessions on each day. The total attendance was about seventy-five, including sixty-three members. President H. B. Fine occupied the chair, being relieved by ex-President H. S. White. The following new members were admitted: Professor Ida Barney, Rollins College; Professor Louis Brand, University of Cincinnati; Professor C. W. Cobb, Amherst College; Professor J. C. Fitterer, University of Wyoming; Mr. G. H. Graves, Columbia University; Dr. Solomon Lefschetz, University of Nebraska; Mr. G. H. Light, Purdue University; Mr. E. S. Palmer, Rutgers College; Professor E. R. Smith, Pennsylvania State College. Eight applications for membership were received. The total membership of the society is now 669, an increase of 27 during the past year.

On Wednesday evening forty-two of the members gathered at the annual dinner at the Murray Hill Hotel. These informal dinners have long been recognized as one of the most attractive features of the meetings.

The treasurer's report shows a balance of \$8, 723.89, or deducting outstanding bills, about \$8,200, a slight increase for the year. The income from sales of publications was \$1,513.66. The life membership fund now amounts to \$4,137.17. The number of papers read at all meetings of the year was 180; the total attendance of members was 350. At the annual election 197 votes were cast. <sup>12</sup> In June Mr. A. H. Howell set traps in several of these hills, but without catching anything, which seems to indicate that the animals were not working near the surface at that time.

<sup>is</sup> Since Dr. Merriam's monograph some additional notes on the habits of this species have been published by Mr. C. L. Webster in the *American Naturalist*, 31, pp. 114–120, 1897. The society's library has increased to 3,840 volumes, beside some 500 unbound dissertations.

At the annual election, which closed on Thursday morning, the following officers and other members of the council were chosen: Vice-presidents, H. F. Blichfeldt and Henry Taber; Secretary, F. N. Cole; Treasurer, J. H. Tanner; Librarian, D. E. Smith; Committee of Publication, F: N. Cole, E. W. Brown and Virgil Snyder; Members of the Council (to serve until December, 1914), A. B. Coble, E. W. Davis, Oswald Veblen and E. B. Wilson;

The following papers were read at this meeting: W. M. Smith: "A characterization of isogonal and equitangential trajectories."

C. L. E. Moore: "Surfaces in hyperspace which have a tangent line with three-point contact passing through each point."

J. E. Rowe: "How to find a set of invariants for any rational curve of odd order."

J. E. Rowe: "A covariant point of the  $R^4$ , and a special canonical form."

R. L. Moore: "On the sufficient conditions that an integral equation of the second kind shall have a continuous solution."

E. B. Wilson: "Some mathematical aspects of relativity."

Edward Kasner: "Families of surfaces related to an arbitrary deformation of space."

H. B. Phillips and C. L. E. Moore: "Algebra of plane projective geometry."

Anna L. Van Benschoten: "Products of quadric inversions and linear transformations in space" (preliminary report).

Arthur Ranum: "N-dimensional spreads generated by  $\infty^1$  flats."

O. E. Glenn: "Generalizations of a theorem on reducible quantics, due to Eisenstein." F. R. Sharpe: "Finite groups of birational

transformations in the plane."

John Eiesland: "On a flat spread-sphere geometry in an odd dimensional space."

C. N. Moore: "The summability of the double Fourier series, with applications."

S. E. Slocum: "A general formula for torsional deflection."

G. A. Miller: "Groups which contain a given number of operators whose orders are powers of the same prime."

R. G. D. Richardson: "Theorems of oscillation for three self-adjoint linear differential equations of the second order with three parameters."

L. A. Howland: "Points of undulation of algebraic curves."

C. N. Haskins: "Note on certain selective integrals."

L. P. Eisenhart: "Ruled surfaces with isotropic generators."

J. W. Young: "On algebras defined by groups of transformations."

J. W. Young: "A generalization to 3-space and to *n*-space of the inversion geometry in a plane" (preliminary communication).

L. L. Silverman: "On absolute or unconditional summability."

L. L. Silverman: "Tests for Cesàro summability."

W. B. Fite: "Note on a collineation group in n variables."

L. P. Eisenhart: "Congruences of minimal lines in a four-space."

The Chicago Section of the society met at the University of Chicago on December 29-30. The next meeting of the society will be held at Columbia University on February 24.

> F. N. COLE, Secretary

## THE AMERICAN PHILOSOPHICAL ASSOCIATION

THE American Philosophical Association held its eleventh annual meeting at Harvard University, Cambridge, on December 27, 28 and 29, 1911. The meeting was marked by an unusually large attendance and by keen interest in the proceedings. A majority of the papers read centered around two main subjects selected for discussion, the one on the relation of object and consciousness in sense perception, the other on evolution. The discussion of the first subject was characterized by a departure from the method of previous meetings. This year both the papers read and the subsequent discussion were based on a carefully prepared committee report, in which both tentative definitions and an analysis of the problem were made. While this method did not result in an agreement of any great extent, it served to clarify the problem and to bring to a sharper focus the various issues involved in it. The committee which prepared this report was continued and given power to select the problem for next year, to formulate the issues involved in it, and to arrange for the discussion. Three papers and the presidential address were read on the subject of evolution, and these as well as the other papers read received vigorous discussion. The association empowered the executive committee to arrange, if possible, some future meetings with other societies in order that joint sessions may be held to discuss such questions as that of mechanism and vitalism. E. G. SPAULDING,

Secretary

## THE AMERICAN ASSOCIATION OF ECONOMIC ENTOMOLOGISTS

THE 24th annual meeting of the American Association of Economic Entomologists was held in the new National Museum, Washington, December 27-29. The meeting was called to order on Wednesday afternoon, December 27, and after the routine business of opening the session was disposed of the annual address entitled "The Relation of the Economic Entomologist to His Environment" was delivered by the president, F. L. Washburn, state entomologist of Minnesota.

On the following day papers were read at morning and afternoon sessions, and on Friday morning, at the close of several interesting papers, the final business of the session was transacted and the meeting adjourned.

The report of the secretary showed that the membership of the association had increased slightly during the year of 1911, and at the meeting over forty new members were admitted. This makes the total membership of the association, exclusive of foreign members, more than three hundred, and the interest shown in the association, especially by the younger members, augers well for its future success.

Among the more important business matters that were transacted was an arrangement whereby the official organ of the association, the Journal of Economic Entomology, will, in the future, be published by the association instead of by the publishing company, as heretofore. The present editorial board will serve for the coming year, with the exception of the business manager of the Journal, Professor E. D. Sanderson, Morgantown, West Virginia, who voluntarily retired. The management of the Journal has been placed in the hands of the secretary of the association.

The following officers were elected:

President-W. D. Hunter, Dallas, Texas.

First Vice-president-T. J. Headlee, Manhattan, Kansas.

Second Vice-president—R. A. Cooley, Bozeman, Montana.

"Secretary—A. F. Burgess, Melrose Highlands, Mass.

A full account of the business transacted at the meeting together with the papers read with the discussions will be published in the *Journal of Economic Entomology*, the first number of which for the current year will be issued February 15.