nal of Physiology and successfully publishing it for many years, the council was entrusted to arrange for the dedication of a volume of the *Journal* to Dr. Porter.

The following persons were elected to membership in the society: A. Arkin, University of West Virginia; A. T. Cameron, University of Manitoba; P. M. Dawson, University of Wisconsin; C. M. Gruber and E. B. Krumbhaar, University of Pennsylvania; E. N. Harvey, Princeton University; II. L. Higgins, nutrition laboratory of the Carnegie Institution; Jessie L. King, Goucher College; F. C. McLean, Rockefeller Institute; S. Morgulis and E. L. Scott, Columbia University; G. B. Roth, Hygienic Laboratory, Washington.

Officers for 1915

President—W. B. Cannon.

Secretary—C. W. Greene.

Treasurer—J. Erlanger.

Additional Members of the Council—W. H. Howell, J. R. Macleod, W. E. Garrey, W. J. Meek.

Despite the unusual defaults in the matter of the scientific program, and the presence of only a few members from the Atlantic seaboard, the meeting was a success, due largely to the considerate efforts and the generous hospitality of the "local committee." The opportunity to inspect the new laboratories and the hospitals of Washington University Medical School by itself more than compensated for the trip to St. Louis. It appears that this school has actually made an advance beyond the "stone age" of the American universities in general. In material equipment for medical research and teaching, Washington University Medical School is second to none, if not superior to all other medical schools in this country.

> A. J. Carlson,
> *Secretary*

University of Chicago,
January, 1915

THE AMERICAN MATHEMATICAL SOCIETY

The twenty-first annual meeting of the society was held at Columbia University on Friday and Saturday, January 1–2, 1915, the attendance at the four sessions including 95 members, a considerable increase over previous records. The occasion was especially marked by the delivery of President Van Vleck's retiring address, the subject of which was "The rôle of the point-set theory in geometry and dynamics."

At the opening session President Van Vleck took the chair, being relieved by Vice-president L. P. Eisenhart and at the closing session by the President-elect, Professor E. W. Brown, and Vice-president Veblen. The following new members were elected: Dr. Florence E. Allen, University of Wisconsin; Dr. Nathan Altshiller, University of Washington; Dr. D. F. Barrow, University of Texas; Dr. R. B. Robbins, Sheffield Scientific School; Mr. C. H. Yeaton, University of Chicago. Fifteen applications for membership in the society were received.

At the annual election the following officers and members of the council were chosen:

President—E. W. Brown.

Vice-presidents—F. R. Moulton, Oswald Veblen.

Secretary—F. N. Cole.

Treasurer—J. H. Tanner.

Librarian—D. E. Smith.

Committee of Publication—F. N. Cole, Virgil Snyder, J. W. Young.

Members of the Council—G. D. Birkhoff, O. E. Glenn, R. G. D. Richardson, W. H. Roever.

The total membership of the society is now 722, including 72 life members. The treasurer's report shows a balance of $9,461.75. Sales of publications during the past year amounted to $1,843.67. The library now contains about 5,100 volumes, exclusive of unbound dissertations.

A most agreeable social concomitant of the annual meeting was the dinner and smoker at the Yale Club on Friday evening. Seventy members took advantage of this opportunity to renew and extend the acquaintance which is one of the valued objects of the society.

The following papers were read at this meeting:

L. P. Eisenhart: "Transformations of surfaces Ω."

L. L. Silverman: "On the notion of summability for the limit of a function of a continuous variable."

A. B. Coble: "A configuration in finite geometry."

A. B. Coble: "The elliptic norm curve in S_4."

J. E. Rowe: "The symmetric and actual form of certain combinants of two binary n-ics."

Arthur Ranum: "On the differential geometry of the cyclic (circled) surfaces."

A. B. Frizell: "An enumeration of integral algebraic polynomials."

Dunham Jackson: "Expansion problems with irregular boundary conditions."

G. M. Green: "Hypersurfaces and families of curves defined by solutions of a partial differential equation of the second order."

Caroline E. Seely: "Certain non-linear integral equations."

E. B. Van Vleck, presidential address: "The rôle of the point-set theory in geometry and dynamics."

W. F. Osgood: "On the division of space of n dimensions by a simple closed surface."

G. D. Birkhoff: "The functions of several variables defined by linear difference and differential equations."

G. D. Birkhoff: "Note on the reducibility of maps."

Virgil Snyder and F. R. Sharpe: "Certain quartic surfaces belonging to infinite discontinuous cremona groups."

H. S. Vandiver: "A property of cyclotomic integers and its relation to Fermat's last theorem."

J. L. Coolidge: "Circular transformations and complex space."

G. A. Miller: "Note on several theorems due to A. Capelli."

Edward Kasner: "The generalized concept of differential element."

F. N. Cole: "Note on solvable quintics."

G. C. Evans: "Note on the variation of a function depending on all the values of another function."

E. V. Huntington: "A set of postulates for elementary dynamics" (preliminary communication).

F. R. Moulton: "The solution of an infinite system of implicit functions."

C. N. Haskins: "On the roots of the incomplete gamma function."

W. C. Graustein: "On the geodesics and geodesic circles on a developable surface."

D. F. Barrow: "Oriented circles in space."

James Maclay: "A transformation of polynomials relatively to the exponents."

J. W. Alexander II: "A method for resolving the singularities of algebraic manifolds."

T. H. Gronwall: "On the summation method of de la Vallée-Poussin."

T. H. Gronwall: "An integral equation of the Volterra type."

T. H. Gronwall: "On the distortion in conformal representation."

The winter meeting of the society at Chicago was held on December 28–29. The next regular meeting of the society will be at Columbia University on February 27.

F. N. COLE,
Secretary

SOCIETIES AND ACADEMIES

THE BIOLOGICAL SOCIETY OF WASHINGTON

THE 528th meeting was held in the Assembly hall of the Cosmos Club, October 17, 1914, with President Paul Bartsch in the chair.

Resolutions on the death of Theodore N. Gill, a founder and former president of the society, were presented.

Under the head of Brief Notes, etc., L. O. Howard presented evidence to show that, contrary to report, no birds had been killed in connection with arsenical spraying for the destruction of the gypsy moth in New England. Paul Bartsch reported that English sparrows destroyed many army worms on Washington lawns during the recent invasion by those insects.

The regular program followed.

A Mouse that Lives in Treetops: VERNON BAILEY.

An account of the history and habits of *Phenacomys longicauda* as observed by the speaker near Eugene, Oregon.

Botanical Collecting in the Northwest: A. S. HITCHCOCK.

A general account of a trip to the northwestern part of the United States and British Columbia during the past summer in search of grasses.

The Present State of Fox-farming: NED DEARBORN.

Observations made in Prince Edward Island and elsewhere during the past spring.

THE 529th meeting was held October 31, President Bartsch presiding.

The program consisted of two communications.

Pelage Variations of American Moles: HARTLEY H. T. JACKSON.

Twenty Years' Experience with Great Apes of Western Africa: R. L. GARNER.

Mr. Garner's lecture was profusely illustrated with lantern slides and gave much new information relative to African chimpanzees and gorillas.

THE 530th meeting was called to order by President Bartsch, November 14, 1914.

Brief notes were presented by Marcus M. Lyon, Jr., L. O. Howard, A. D. Hopkins and W. H. Osgood.

Three communications were presented.

Certain Miocene Fossils: WM. PALMER.

The fossils exhibited were obtained by the speaker at the cliff deposits near Chesapeake Beach, Md. Owing to the scanty material on which Cope's types in the Philadelphia Academy