

gested remedies, in so far as concerns the future of our society considered by itself. It may be permitted me, however, to look still further into the future, and to see therein the possibility of a yet wider affiliation than that already discussed, that of the several grand divisions of natural science, on a basis somewhat different from that now obtaining in the American Association for the Advancement of Science, an affiliation in which the American Chemical Society, by reason of its numbers and the importance of its field, shall occupy a most prominent position. Whether or not this vision is ever to come true, we should all work in harmony to the end of the formation of a grand organization of chemists that shall be a power for the greatest good to the profession and to mankind.

W. F. HILLEBRAND

U. S. GEOLOGICAL SURVEY

THE THIRTEENTH ANNUAL MEETING OF
THE AMERICAN MATHEMATICAL
SOCIETY

THE thirteenth annual meeting of the society was held in New York City on Friday and Saturday, December 28-29, 1906, forming a part of the general gathering of scientists in attendance at the meetings of the American Association for the Advancement of Science and the numerous affiliated societies. With this environment went a noticeable increase in attendance, over eighty members being present at the four sessions. Friday morning was devoted to a joint session with Section A of the association and the Astronomical and Astrophysical Society, Professor Simon Newcomb presiding. A large audience listened to seven papers from the fields represented. The remaining three sessions were somewhat crowded with the regular program, to which were added several papers from Section A. The great productive capacity of the society is rapidly

making it a serious problem to provide adequate facilities for presentation and discussion of the output.

At the afternoon session on Friday Professors E. B. Van Vleck and Morley, and on Saturday President White, Vice-President P. F. Smith and Professor Morley occupied the chair. Owing to the recent illness of President Osgood, the presidential address was not delivered; it is hoped that it may be given at some future meeting.

The council announced the election of Mr. E. I. Shepard, of Harvard University, to membership in the society. Eight applications for membership were received. The organization was authorized of a new section of the society, to be known as the Southwestern Section. (A preliminary meeting of the proposed section was held at Columbia, Mo., on December 1.) It was decided to hold the next summer meeting at Cornell University. An amendment of the constitution was adopted by which the editorial committee of the *Transactions* is included in the council.

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

President—H. S. White.

Vice-presidents—Heinrich Maschke, P. F. Smith.

Secretary—F. N. Cole.

Treasurer—W. S. Dennett.

Committee on Publication—F. N. Cole, Alexander Ziwet, D. E. Smith.

Members of the Council to serve until December, 1909—G. A. Bliss, E. W. Brown, M. W. Haskell, A. G. Webster.

The treasurer's report shows a balance of \$5,195.80 on hand December 14, 1906, being a gain of about \$1,360 for the year, and including about \$2,800 life-membership fund. The sales of the society's publications, exclusive of the *Bulletin* sent free to members, amounted during the year to over \$1,500. The library has increased to over 2,500 volumes. The number of papers presented before the society in 1906 was

176. The total attendance of members at the ten meetings of the year was 350; 192 members attended at least one meeting. The total membership of the society is now 547, a gain of 43 during the year.

The publication of the New Haven colloquium lectures, delivered at the last summer meeting, has been generously undertaken by Yale University. The volume will probably appear next fall.

The following papers were read at the meeting:

S. E. SLOCUM: 'The rational basis of mathematical pedagogy.'

F. L. GRIFFIN: 'On the law of gravitation in binary systems.'

JAMES McMAHON: 'A differential property of the lamellar vector field.'

J. I. HUTCHINSON: 'A method of constructing the fundamental region of a discontinuous group of linear transformations.'

JAMES PIERPONT: 'Multiple integrals.'

OSWALD VEULEN: 'Collineations in a finite projective geometry.'

W. R. LONGLEY: 'Some particular solutions in the problem of n bodies.'

MAX MASON: 'The expansion of an arbitrary function in terms of normal functions.'

R. D. CARMICHAEL: 'On Euler's ϕ -function.'

ARTHUR RANUM: 'On the group of classes of congruent matrices.'

W. B. CARVER: 'Sets of quadric spreads connected with the configuration Γ_n, r .'

C. J. KEYSER: 'Circle range transversals of circle ranges in a plane: a problem of construction.'

C. J. KEYSER: 'Concerning the analytic treatment of geometric involution.'

A. B. COBLE: 'A generalization of the plane Hesse configuration.'

A. B. COBLE: 'Involutory Cremona transformations.'

W. E. STORY: 'Denumerants of double differentials.'

VIRGIL SNYDER: 'Birational transformations of curves of high genus.'

T. E. McKINNEY: 'On the continued fractions representing properly and improperly equivalent real numbers in a system of continued fractions depending on a variable parameter.'

H. E. HAWKES: 'On elementary divisors.'

E. B. WILSON: 'Rotations in higher dimensions.'

EDWARD KASNER: 'Systems of extremals in the calculus of variations.'

EDWARD KASNER: 'The motion of a particle in a resisting medium.'

R. P. STEPHANS: 'Note on a system of curves of class n and order $2(n-1)$.'

D. E. GILLESPIE: 'On the construction of an integral of Lagrange's equation in the calculus of variations.'

F. R. SHARPE: 'The general circulation of the atmosphere.'

The following papers from the program of Section A of the American Association for the Advancement of Science were also laid before the society:

G. B. HALSTED: 'The sect carrier and the set sect.'

HARRIS HANCOCK: 'On a fundamental theorem of Weierstrass by means of which the theory of elliptic functions may be established.'

G. A. MILLER: 'On the minimum number of operations whose orders exceed two in any finite group.'

The informal dinner, always arranged in connection with each meeting of the society, adds much to the pleasure of these occasions. Despite the many distractions incident to the general gathering of scientists, over forty members attended the dinner on Friday evening and passed a few pleasant hours in social intercourse and renewal of old acquaintance.

The Chicago Section met on the same days as the society. The next meeting of the society, and also of the San Francisco Section, falls on Saturday, February 23.

F. N. COLE,
Secretary

THE AMERICAN PHYSIOLOGICAL SOCIETY

At the meeting of the society, held in New York City, December 27, 28 and 29, the following officers were elected:

President—William H. Howell, Johns Hopkins University.

Secretary—Lafayette B. Mendel, Sheffield Scientific School, Yale University.

Treasurer—Walter B. Cannon, Harvard Medical School.