

Moisture content of the soil was also determined for a few of the collections. This problem was more difficult to solve with accuracy than that of temperature, because soil samples were necessarily collected on Saturday or Sunday and held over until Monday for weighing. This was done, however, with a great amount of care and the samples kept in a place as free from moisture changes as possible during that time.

Moisture content varied from .0591 to .1792. The average was .10276.

This region varies greatly in the texture of its soil, which belongs to the rough, broken phase of the Altamont series and is made up mostly of loam and clay loam constituents. When there was an abundance of stages of sporocarps of *Hysterangium*, I found that the soil always felt cold and moist.

The experience of the collector, as given in the foregoing statements, seems to indicate with clearness and approximate exactitude the conditions in this one exceedingly favorable locality for hypogaei. The temperature of the soil varies around 52° F., from 42° F. as minimum, to 57° F. as maximum, but largely oscillating between 48° F. and 56° F. (8.9° C. and 13.3° C.).

The production of young sporocarps, as well as seeming invigoration of the mycelium, seem directly connected with variation in the moisture supply and to be associated particularly with fog conditions.

The edaphic conditions, while only incidentally considered, are nevertheless definite, viz., coarse, well-drained soil, protected from too rapid change in temperature and moisture content by a leafy cover mat.

The biotic conditions indicate association with a broad leaf forest association, the oak component probably being particularly influential in the case of the species of *Hysterangium* studied.

While there are doubtless variations from these conditions, at least in small detail, for individual species and genera of the hypogaeous fungi of our region, yet these general conditions are probably approximate for all.

WILLIAM ALBERT SETCHELL
MARTHA GERTRUDE WATSON

UNIVERSITY OF CALIFORNIA

SOCIETIES AND ACADEMIES

AMERICAN SOCIETY OF NATURALISTS

THE forty-third meeting of the American Society of Naturalists was held in New Haven, December 28 to 30, 1925. The program of the first two days was arranged in cooperation with the joint genetics sections of the Botanical Society of America and American Society of Zoologists, whose official meeting

was held in Kansas City. Twenty-nine papers on genetic subjects were presented. On Wednesday the annual symposium was held, the subject being "The Structure of Protoplasm." It included the following contributions:

Some colloidal aspects of protein: PROFESSOR W. A. PATRICK, The Johns Hopkins University.

The physical state of protoplasm: PROFESSOR ROBERT CHAMBERS, Cornell University Medical College.

Newer aspects of the alveolar structure of protoplasm: PROFESSOR E. B. WILSON, Columbia University.

Some physiological aspects of the problem of protoplasmic structure: DR. W. J. V. OSTERHOUT, The Rockefeller Institute for Medical Research.

Elasticity as an indicator of protoplasmic structure: PROFESSOR WILLIAM SEIFRIZ, University of Pennsylvania.

The structure of protoplasm in Amoeba proteus: PROFESSOR S. O. MAST, The Johns Hopkins University.

The physical structure of the protoplasm of sea urchin eggs: PROFESSOR L. V. HEILBRUNN, University of Michigan.

Surface film theory of the function of mitochondria: DR. E. V. COWDRY, The Rockefeller Institute for Medical Research. (By title.)

The Naturalists' dinner was given in the Hotel Taft. After the dinner, the president, Dr. C. Hart Merriam, related many of the beliefs of California Indians about animals.

New members were elected as follows:

C. O. Appleman, University of Maryland; Ralph E. Cleland, Goucher College; F. E. Clements, Carnegie Institution of Washington; E. V. Cowdry, Rockefeller Institute; C. Stuart Gager, Brooklyn Botanic Garden; E. W. Gudger, American Museum of Natural History; Lewis V. Heilbrunn, University of Michigan; S. O. Mast, Johns Hopkins University; H. A. Pilsbry, Academy of Natural Sciences (Phila.); Inez Whipple Wilder, Smith College; A. H. Wright, Cornell University.

Professor J. Arthur Harris, University of Minnesota, was elected president for 1926; Dr. J. A. Detlefsen, editor of *Biological Abstracts*, vice-president; A. Franklin Shull, University of Michigan, secretary, and E. W. Sinnott, Connecticut Agricultural College, treasurer.

A. FRANKLIN SHULL,
Secretary

AMERICAN MATHEMATICAL SOCIETY

THE thirty-second annual meeting of the American Mathematical Society was held in New York City, from Thursday to Saturday, December 31, 1925, to January 2, 1926. The regular sessions were held at Hunter College, preceded on December 31 by the annual meeting of the board of trustees, held at the Faculty Club of Columbia University. This meeting was made especially interesting by the exhibition at Hunter College of an important part of the collec-

tion of objects bearing on the history of mathematics belonging to Professor D. E. Smith, of Columbia University, and by the invitation from Dr. G. A. Plimpton for attending members to view at his house his remarkable collection of old mathematical books and manuscripts. Professor Smith presided at the dinner on Friday evening, at which about one hundred and fifty members and their friends were present.

The attendance at the regular sessions included 129 members of the society. The secretary announced the election of forty-nine persons to membership. At the annual election, which closed Friday afternoon, the following officers and other members of the council were elected: *Vice-presidents*, Professors E. T. Bell and C. N. Moore; *secretary*, Professor R. G. D. Richardson; *treasurer*, Professor W. B. Fite; *member of the editorial committee of the Bulletin*, Professor W. R. Longley; *member of the editorial committee of the Transactions*, Professor Dunham Jackson; *members of the council*, Professors Tomlinson Fort, Olive C. Hazlett, J. F. Ritt, E. B. Stouffer and Norbert Wiener.

At the meeting of the council, Professor Virgil Snyder was named to succeed Professor E. V. Huntington as representative of the society on the National Research Council for a period of three years, beginning July 1, 1926. Professors E. B. Crawley and R. G. D. Richardson were appointed to represent the society on the council of the American Association for the Advancement of Science. To signalize the completion of the endowment campaign, a minute reviewing the events of the three years of effort was spread upon the records, and letters of felicitation and thanks were sent to Professors J. L. Coolidge and Oswald Veblen. In order to mark the approaching retirement from academic life of Professor D. E. Smith, for nineteen years librarian of the society, a resolution of felicitation was adopted; this resolution was later read at the dinner. It was decided that the next Josiah Willard Gibbs Lecture should be delivered at the Philadelphia meeting of the society, in December, 1926. Professors E. T. Bell and Anna J. Pell Wheeler were invited to deliver the lectures at the colloquium to be held in Madison in the summer of 1927.

The ordinary membership in the society is now 1,542, including 181 nominees of sustaining members and 81 life members. There are also 37 sustaining members, the total amount of whose annual dues is \$5,300. The trustees adopted a budget for 1926 showing estimated receipts and expenditures of \$23,987.94 and \$23,962.94, respectively. The library of the society now contains 6,931 volumes; a catalogue has been prepared, and will be distributed to members early in 1926.

At the request of the committee on program, Professors D. E. Smith and O. D. Kellogg delivered special addresses; the titles were, respectively, "Material for the Study of the History of Mathematics" and "The Dirichlet Problem."

In addition to the invitation addresses, forty-six papers were read at this meeting.

R. G. D. RICHARDSON,
Secretary.

THE WESTERN CHRISTMAS MEETING OF THE AMERICAN MATHEMATICAL SOCIETY

THE twenty-fourth western meeting of the American Mathematical Society with which was combined the eighteenth regular meeting of the Southwestern Section was held on Tuesday and Wednesday, December 29, 30, 1925, in Kansas City, Mo., in conjunction with the Mathematical Association of America and in affiliation with the convocation week meetings of the American Association for the Advancement of Science. About 140 persons were present, among them 102 members of the society.

At the joint session with the Mathematical Association and section A of the American Association held on Wednesday forenoon, Professor T. H. Hildebrandt, vice-president of the society, read a paper on "The Heine-Borel Theorem and Allied Problems"; Professor J. C. Fields gave the address of the retiring chairman of section A on "The Algebraic Numbers and Division."

On Wednesday afternoon, the third Josiah Willard Gibbs lecture was given under the joint auspices of the society and the American Association for the Advancement of Science at one of the general sessions of the association. Professor J. Pierpont was the speaker, and his subject was "Some Modern Views of Space." The lecture, attended by a large audience, was a great success and aided considerably in carrying out the purpose of the Gibbs lectureship, founded by the American Mathematical Society in order to make known to a wider public the general aims of and the most important advances in mathematical research.

At the sessions of Tuesday forenoon and afternoon the number of papers presented to the sections were: analysis 14, algebra 10, point sets 7, geometry, mechanics and applied mathematics 13.

It was announced that at the meeting of the society in Chicago on April 2 and 3, Professor Dresden would give the symposium lecture on recent work in the calculus of variations.

ARNOLD DRESDEN,
Assistant Secretary.