

sucking action as the initial stimulus for gall production.

HARRY R. ROSEN

U. S. NATIONAL MUSEUM

THE QUARTER-CENTENNIAL ANNIVERSARY OF THE OHIO ACADEMY OF SCIENCES

THE twenty-fifth annual meeting of the Ohio Academy of Science was held at the Ohio State University, Columbus, on Friday and Saturday, November 26 and 27, 1915, under the presidency of Professor J. Warren Smith, of Columbus.

Owing to the anniversary character of the meeting the usual program of volunteer papers was replaced by a series of invited addresses, as follows:

Presidential Address, "Agricultural Meteorology," Professor J. Warren Smith, United States Weather Bureau, Columbus.

"Applied Meteorology and the Work of the Weather Bureau," Dr. Charles F. Marvin, Chief United States Weather Bureau, Washington, D. C.

"The Relation of the Academy to the State and to the People of the State," Dr. T. C. Mendenhall, Ravenna.

"Historical Sketch of the Ohio Academy of Science," Professor William R. Lazenby, Ohio State University, Columbus.

Reviews of Scientific Progress in the Quarter Century:

"Geology," Professor Frank Carney, Denison University, Granville.

"Botany," Professor Bruce Fink, Miami University, Oxford.

"Physics," Professor Frank P. Whitman, Western Reserve University, Cleveland.

"Zoology," Professor Edward L. Rice, Ohio Wesleyan University, Delaware.

"Chemistry," Professor William McPherson, Ohio State University, Columbus.

"Archeology," Professor G. Frederick Wright, Oberlin College, Oberlin.

At the supper, held on Friday evening at the Ohio Union, short addresses were given by visiting delegates from other scientific societies. Governor Willis had expected to be present and to speak, but was unavoidably prevented at the last moment.

Notice was received of the appointment of the following delegates; those marked with the asterisk were present at the meeting.

American Association for the Advancement of Science,

*Professor L. O. Howard, Washington, D. C.
Boston Society of Natural History,

*Professor Frederick C. Waite, Cleveland, O.
Chicago Academy of Science,

Dr. Frank C. Baker, Chicago, Ill.
Indiana Academy of Science,

*Dr. D. W. Dennis, Richmond, Ind.
Mr. E. B. Williamson, Bluffton, Ind.

Iowa Academy of Science,

*Professor Herbert Osborn, Columbus, O.
Dr. Charles R. Keyes, Des Moines, Ia.

New York Academy of Science,
Mr. Emerson McMillin, New York City.
Professor H. P. Cushing, Cleveland, O.

Academy of Natural Sciences of Philadelphia,
Dr. Howard Ayers, Cincinnati, O.

Washington Academy of Sciences,

*Professor Dayton C. Miller, Cleveland, O.

*Dr. Charles F. Marvin, Washington, D. C.
Cincinnati Section of the American Chemical Society,

Dr. Lauder W. Jones, Cincinnati, O.
Dr. Alfred Springer, Cincinnati, O.

Cincinnati Society of Natural History,
Dr. DeLisle Stewart, Cincinnati, O.

Columbus Audubon Society,

*Professor J. C. Hambleton, Columbus, O.
Miss Lucy Stone, Columbus, O.

Denison Scientific Association,

*Dr. George Fitch McKibben, Granville, O.

*Mr. Charles W. Henderson, Granville, O.

Wooster University Scientific Club,

*Mr. Frank H. McCombs, Wooster, O.

The Cuvier Press Club,

Mr. James W. Faulkner, Cincinnati, O.

Association of Ohio Teachers of Mathematics and Science,

*Professor S. E. Rasor, Columbus, O.

Ohio State University Scientific Association,

Professor Karl D. Swartzel, Columbus, O.

*Professor James R. Withrow, Columbus, O.
Oxford Science Club,

*Professor J. A. Culler, Oxford, O.

Otterbein Science Club,

*Mr. Richard M. Bradfield, Westerville, O.

Baldwin-Wallace Science Seminar,

*Professor E. L. Fullmer, Berea, O.

The following members of the old Tyndall Association, so potent in the scientific life of Columbus and Ohio in the seventies and eighties, were also present by special invitation:

Mr. H. N. P. Dole, Columbus, O.
Mr. Martin Hensel, Columbus, O.

Mr. Curtis C. Howard, Columbus, O.
 Professor William R. Lazenby, Columbus, O.
 Dr. C. L. Mees, Terre Haute, Ind.
 Dr. T. C. Mendenhall, Ravenna, O.
 Dr. Sidney A. Norton, Columbus, O.
 Mr. D. E. Williams, Columbus, O.

In the business session the most notable action was the adoption of a constitutional amendment, suggested at the previous annual meeting, by which the date of the annual meeting is changed from Thanksgiving to March or April, the exact date to be fixed by the executive committee. By vote of the academy the next meeting will be held in the spring of 1916.

The trustees of the research fund announced a further gift by Mr. Emerson McMillin, of New York, of \$250 for the encouragement of the research work of the academy.

As a result of the suggestions contained in the address by Dr. Mendenhall, on "The Relation of the Academy to the State and to the People of the State," a committee on legislation was appointed, consisting of Dr. T. C. Mendenhall, chairman, Professor F. C. Waite and Professor Herbert Osborn.

The previous affiliation of the academy with the *Ohio Journal of Science* was continued with minor modifications; but the incoming president was instructed to appoint a committee to confer with the committee on legislation and to "investigate carefully possible ways and means whereby the academy can successfully take over the *Ohio Journal of Science* and how soon this can be done, the committee to report back to the academy at its next annual meeting." President Hubbard appointed Professor J. Warren Smith, chairman, Professor Frank Carney, Professor F. C. Waite, Professor J. S. Hine and Professor C. G. Shatzer.

Forty-one new members were elected at the meeting.

The officers and standing committees for 1915-1916 will be as follows:

President—Professor G. D. Hubbard, Oberlin College.

Vice-president for Zoology—Professor F. L. Landacre, Ohio State University.

Vice-president for Botany—Professor M. E. Stickney, Denison University.

Vice-president for Geology—Professor T. M. Hills, Ohio State University.

Vice-president for Physics—Professor L. T. More, University of Cincinnati.

Secretary—Professor E. L. Rice, Ohio Wesleyan University.

Treasurer—Professor J. S. Hine, Ohio State University.

Executive Committee, together with the president, secretary and treasurer, members *ex-officio*—Professor L. B. Walton, Kenyon College, and Professor C. G. Shatzer, Wittenberg College.

Trustees of Research Fund—Professor W. R. Lazenby, Ohio State University; Professor M. M. Metcalf, Oberlin College; Professor N. M. Fenneman, University of Cincinnati.

Publication Committee—Professor J. H. Schaffner, Ohio State University; Professor C. H. Lake, Hamilton; Professor L. B. Walton, Kenyon College.

Library Committee—Professor W. C. Mills, Ohio State University; Professor F. O. Grover, Oberlin College; Professor J. A. Culler, Miami University.

EDWARD L. RICE,
Secretary

DELAWARE, OHIO

THE TENNESSEE ACADEMY OF SCIENCE

THE sixth meeting (fourth annual meeting) of the Tennessee Academy of Science was held on November 26, 1915, at George Peabody College for Teachers, Nashville, Tenn. President W. E. Myer presided. The following papers were read and discussed:

"Why Potteries should be Established in West Tennessee," by Wilbur A. Nelson.

"Preservation of Our Forests," by R. S. Madrox.

"Cause of the Stylolitic Structure in the Tennessee Marble," by C. H. Gordon.

"Phosphate Rocks of Johnson County, Tenn.," by Olaf P. Jenkins.

"The Evolution of Mississippi River Craft as Influenced by Geographic Conditions," by Charles C. Colby.

"Recent Results in Mathematical Astronomy," by H. E. Buchanan.

"An Irrigation Slide for Prolonged Observation of Living Aquatics"; (b) "A Simple Device for Aerating Aquaria"; by Samuel M. Bain.

"Guessing as Influenced by Odd Numbers," by F. B. Dresslar.

"Nature and Origin of the Holston Marble Formation in East Tennessee," by C. H. Gordon.

"The Ordination of Sciences in Education," by R. I. Raymond.

Memorial Sketches of Deceased Members: (a) "Dr. William L. Dudley," by L. C. Glenn; (b)