

PROCEEDINGS OF THE TENNESSEE ACADEMY OF SCIENCE

J. T. MCGILL

MEETING OF THE EXECUTIVE COMMITTEE

The Committee met at the Hermitage Hotel, Nashville, at 7:30 P. M., November 14, 1935. There were present George M. Hall, president, Dr. William Litterer, vice president, Jesse M. Shayer, A. F. Ganier, Damon Headen, J. T. McGill, members of the committee, and, by invitation, A. E. Parkins and C. S. Shoup.

New members were elected as follows: John C. Caldwell, Nashville; Wilbur M. Grimm, Harrogate; Kirby E. Jackson, Greeneville; Newton H. Baker, Nashville; Clough A. Waterfield, Obion; Nathan H. Woodruff, Donelson; Burton Jones, Chattanooga.

The offer of the American Association for the Advancement of Science of a grant of \$50.00 for research to replace cash allowance to the Academy for 1935 was accepted. Chairman of committees for November meeting of the Academy were appointed: *General*, William Litterer; *Program*, A. E. Parkins; *Publicity*, G. R. Mayfield; *Entertainment*, H. A. Webb. Dr. George M. Hall was selected to make the Academy Address at the November meeting; Dr. J. T. McGill to represent the Academy at the meeting of the American Association for the Advancement of Science at the meeting in St. Louis next December.

MEETING OF THE ACADEMY

The thirty-seventh meeting of the Academy was held on the 29 and 30 of November, 1935, in the Industrial Arts Building of George Peabody College for Teachers, Nashville. The program of the meeting comprised general sessions Friday morning and afternoon, a session of the botanical section on Friday afternoon, a dinner and address Friday evening at the Hermitage Hotel, a general session and business meeting Saturday morning. The roll of members attending the meeting (probably incomplete) numbered sixty.

Indicative of the general interest in the work of the Academy, the program included contributors representing East, Middle, and West Tennessee, twelve schools of various character, fifteen branches of science, five departments of the State, and two branches of the United States Government Service.

PROGRAM

Friday morning and afternoon and Saturday morning, President George M. Hall presiding.

GENERAL SECTION

Samuel L. Meyer (Biology), Vanderbilt University. "The Mountain Lake Biological Station of the University of Virginia."

- C. L. Baker (Biology), Southwestern. "Survey of Corals of Key Largo," Collected by the Southwestern Marine Expedition.
- R. T. Lageman (Physics), Vanderbilt University. "The Rotation of the Plane of Polarization of Light by a Magnetic Field—the Faraday Effect."
- David Kirsh (Bacteriology), University of Tennessee, Memphis. "Lipase Production by *Penicillium Oxalicum* and *Aspergillus Flavus*."
- A. Richard Bliss, Jr. (Medicine), Memphis. "Absorption of Drugs by Inunction."
- H. C. Sanborn (Philosophy), Vanderbilt University. "Inheritance of Song in Birds." (Report of Progress.)
- E. L. Spain, Jr. (Geology), TVA, Knoxville. "Tripoli Deposits of West Tennessee Valley."
- G. I. Whitlatch (Geology), Tennessee Division of Geology, Nashville. "The Porter Creek Clays of West Tennessee as a Bleaching Agent for Oils."
- G. I. Whitlatch (Geology), Tennessee Division of Geology, Nashville. "Some Notes on the Probable Occurrence of the Ackerman Formation in Tennessee."
- Latimer J. Wilson (Astronomy), Astronomer and writer, Nashville. "The Physical Aspects of the Moon in Eclipse."
- Clarence T. Jones (Astronomy), Chattanooga. "A Municipal Astronomical Observatory at Chattanooga."
- O. C. Ault (Economics), George Peabody College for Teachers. "Federal Old Age Security."
- C. C. Sims (History and Social Science), State Teachers College, Murfreesboro. "The Scientific Method and the Social Sciences."
- Lester Wheeler (Social Science), State Teachers College, Johnson City. "A Comparative Study of the Dietary Habits of Remote Mountain People."
- W. W. Spellings (Geography), Watkins Institute, Nashville. "The Cost and Efficiency of the Lake-to-Gulf Waterway Versus Railroads."
- Kirby E. Jackson (Chemistry), Captain Co. 4492, CCC, TVA, 1934, Greenville. "The History of Mustard."
- A. F. Ganier (Ornithology), Engineer, N., C. & St. L. R. R., Nashville. "Factors Which Prevent the Increase of Tennessee Birds."
- Kendall E. Born (Geology), Tennessee Division of Geology, and Charles W. Wilson, Jr. (Geology), Vanderbilt University. "The Flynn Creek Disturbance, Jackson County, Tennessee."
- G. I. Whitlatch (Geology), Tennessee Division of Geology. "Notes on the Ceramic Properties of the Porters Creek Clay and Their Application to Light Weight Brick."
- R. M. Williamson (Meteorology), U. S. Weather Bureau, Nashville. "Notes on the Study of Air Mass Analysis."
- J. D. Ives (Biology), Carson-Newman College. "Notes on the Hibernation of Mosquitoes in Caves."
- Herbert S. Wells (Pharmacology), Vanderbilt Medical School. "A Mechanism for the Transfer of Water Against an Osmotic Gradient, with Suggested Biological Implications."
- Paul Boynton (Psychology), George Peabody College for Teachers. "A Study of the Play Interests of Elementary School Children."
- Ruth R. Puffer (Health), Tennessee State Department of Health. "The Effect of the Distribution of Medical Service on Vital Statistics Data, as Shown in Tennessee."
- Frances L. Dittes (Chemistry and Nutrition), Madison Rural Sanitarium. "Biological Availability of Cystine As Found in the Soy Bean."

- John C. Caldwell (Biology), Director of Education, State Fish and Game Department. "Progress of Research and Education in Game Conservation."
- Claude R. Fountain (Physics), George Peabody College for Teachers. "A Few Facts and Principles Every Auto Driver Should Know."
- Ben B. Coffey, Jr. (Ornithology), Tennessee Inspection Bureau, Memphis. "Chimney Swift Banding at Memphis."
- William M. Mebane (Chemistry), State Teachers College, Murfreesboro. "A Study of the Equation of State at Low Pressures—Preliminary Report."
- J. V. Ragsdale (Physics), University of Tennessee, Memphis. "Nuclear Chemistry."

BOTANICAL SECTION

Friday afternoon, Dr. L. R. Hesler, Chairman, presiding.

- George R. Gage, Professor of Botany, Vanderbilt University. "A Second Report on the Status of the Dutch Elm Disease."
- Jesse M. Shaver, Professor of Biology, George Peabody College for Teachers. "Some Unusual Variations in the Leaves of the Sugar Maple."
- Aaron J. Sharp, Professor of Botany, University of Tennessee, Knoxville. "Interesting Bryophytes from the Southern Appalachians."
- D. R. Bartoo, Professor of Botany, Tennessee Polytechnic Institute. "All in a Day's Trip."
- Stanley A. Cain, Professor of Botany, University of Tennessee, Knoxville. "Some Forest Types of the Great Smoky Mountains."
- J. R. Endsley, Professor of Science, Freed-Hardeman College. "Some Additions to the Ferns of Chester County, Tennessee."
- Hobart Massey, County Agricultural Agent, McMinnville. "Some Ferns of Marion County, Tennessee."
- H. M. Jennison, Associate Naturalist, National Park Service, Elkmont. "Trees of the Great Smoky Mountain National Park."
- Harold C. Bold, Instructor of Biology, Vanderbilt University. "Some Interesting Algae from Tidewater, Maryland."
- Robert Platt, III, Teacher of Science, Benham High School, Benham, Kentucky. "Some Violets of Tennessee."
- L. R. Hesler, Professor of Botany, University of Tennessee. "Interesting Fungi from the Southern Appalachians."
- Stanley A. Cain, Professor of Botany, University of Tennessee, Knoxville. "A Comparative Study of Sampling Forest Communities."
- Jesse M. Shaver, Professor of Biology, George Peabody College for Teachers. "Vacationing Among Tennessee Ferns."

The papers by David Kirsh, Clarence T. Jones, C. C. Sims, Kirby E. Jackson, Paul Boynton, Ben B. Coffey, and J. V. Ragsdale were not read, the authors not being in attendance at the meeting.

The Academy address was given by President George M. Hall on Friday evening at the dinner at the Hermitage Hotel. The subject of the address was "The Economic and Cultural Value of Geology."

At the business meeting Saturday morning the Secretary-Treasurer read in part the minutes of the meetings of the Academy at Nashville in November, 1934, and at the Reelfoot Lake Biological Station in April, 1935, and the meetings of the Executive Committee in January,

March, April, and November, 1935, and made a report of the membership and financial status of the Academy as of date November 27, 1935.

The committee on nominations, L. R. Hesler, F. G. Slack, C. L. Baker, made a report which was adopted and confirmed by the election of its nominees: Claude R. Fountain, Nashville, *President*; Paul J. Kruesi, Chattanooga, *Vice President*; John T. McGill, Nashville, *Secretary-Treasurer*.

President Fountain appointed Dr. Louis J. Bircher a member of the Executive Committee in place of Professor George D. Howell for the term of three years.

Saturday afternoon Professors Jesse M. Shaver and Aaron V. Sharp led an excursion in search of native ferns and mosses.

MEETING OF THE EXECUTIVE COMMITTEE

The Committee met at 7:30 P. M., December 4, 1935, in the Secretary's office, Furman Hall; present: Claude R. Fountain, Jesse M. Shaver, A. R. Ganier, Louis J. Bircher, and J. T. McGill.

It was voted that the book, "A Brief Sketch of the Life and Works of Dr. Augustin Gattinger," seventy-five copies of which had been received from the author in part payment of his indebtedness to the Academy, be advertised in the *JOURNAL OF THE TENNESSEE ACADEMY OF SCIENCE* for sale at \$2.00 per copy.

The committee awarded the \$50.00 allotted by the American Association for the Advancement of Science to the Tennessee Academy of Science for the year 1935 as a grant to be used for scientific research to Nathan H. Woodruff, B.S., Vanderbilt University, M.A., George Peabody College for Teachers, to continue research on "The acidity of soils at the roots of ferns in Tennessee."

Dr. Charles S. Shoup, Assistant Professor of Biology, Vanderbilt University, was elected in the place of Dr. Charles W. Davis, a member of the Board of Trustees of the Reelfoot Lake Biological Station for a term of three years.

The committee discussed plans for conducting the work next summer at the Reelfoot Lake Biological Station. The matter was left over for further consideration after consultation with the director, Dr. A. Richard Bliss, Jr.