

ventral armature, in a few species, and to the acquirement of claws, running legs or a long propelling tail with expanded neural and hemal arches in others. This wide diversity of structure is intensified by the recognition of *Ichthyocanthus platypus* as a microsauro with an osseous tarsus, serving to confuse still further our hazy ideas of amphibian phylogenesis.

A full description with illustrations will be given of this interesting form in another place.

ROY L. MOODIE

UNIVERSITY OF ILLINOIS,
CHICAGO

THE OHIO ACADEMY OF SCIENCE

THE twenty-fourth annual meeting of the Ohio Academy of Science was held at Ohio State University, Columbus, Ohio, on November 26, 27 and 28, 1914, under the presidency of Dr. T. C. Mendenhall, of Ravenna.

The address of the president was delivered Friday evening, on the subject "Some Pioneers of Science in Ohio"; and on Saturday morning the academy listened to a very timely lecture upon "Foot and Mouth Disease," by Dean D. S. White, of the College of Veterinary Medicine of Ohio State University.

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

In accordance with the report of a committee appointed a year ago, the academy voted to deposit the library of the academy with the library of Ohio State University—an arrangement which may be terminated by either party on suitable notice.

The matter of the celebration of the annual meeting of 1915 as a quarter centennial anniversary was referred to the executive committee.

Twenty-three new members were elected, making the total membership of the academy two hundred and fifty-four.

The officers of the academy for the year 1914-1915 are as follows:

President—Professor J. Warren Smith, Ohio State University and Ohio Section U. S. Weather Bureau.

Vice-presidents—(Zoology) Professor F. C. Waite, Western Reserve University; (Botany)

Professor F. O. Grover, Oberlin College; (Geology) Professor C. G. Shatzer, Wittenberg College; (Physics) Professor J. A. Culler, Miami University.

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

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

Librarian—Professor W. C. Mills, Ohio State University.

Executive Committee, together with the president, secretary and treasurer, members ex officio—Professor C. D. Coons, Denison University; Professor T. M. Hills, Ohio State University.

Board of Trustees of the 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.

The complete scientific program follows:

Presidential Address, "Some Pioneers of Science in Ohio," Dr. T. C. Mendenhall.

Lecture, "The Foot and Mouth Disease," Dean D. S. White, College of Veterinary Medicine, Ohio State University.

Papers

"Efficacy of Lightning Rods," J. Warren Smith.

"Thunderbolt from Whitecliff Bay," Katharine Doris Sharp.

"A Preliminary Survey of Plant Distribution in Ohio," John H. Schaffner.

"Akron Fishbait Industry," Chas. P. Fox.

"The Physiographic Provinces which meet in Ohio," N. M. Fenneman.

"Color and Coat Inheritance in Guinea Pigs," W. M. Barrows.

"Note on a New Nematode Parasite of Cryptobranchus," F. H. Kreeker.

"Prediction of Minimum Temperatures for Frost Protection," J. Warren Smith.

"Is a Dry Summer and Autumn Apt to be Followed by a Wet Winter and Spring with Possible Floods?" J. Warren Smith.

"Comparative Rate of Growth of Certain Timber Trees," William R. Lazenby.

"Inheritance of Taillessness in the Cat," W. M. Barrows and C. A. Reese.

"The Cause of Milk Sickness and Trembles," E. L. Moseley.

- "Notes on Euglenoidina," L. B. Walton.
- "Recent Eruptions of Mount Lassen," Thos. M. Hills.
- "Glaciation in the High Sierras," Thos. M. Hills.
- "Inheritance of Weights in Tomatoes," Fred Perry.
- "The Municipal Care of Shade Trees," J. S. Houser.
- "Influence of Glaciation on Agriculture in Ohio," Edgar W. Owen.
- "The Reflection of X-rays and Gamma Rays from Crystals" (introducing discussion), S. M. J. Allen.
- "A Class Demonstration of the Peltier Effect," J. A. Culler.
- "Behavior of the Arc in a Longitudinal Magnetic Field," R. F. Earhart.
- "Effect of Heat Treatment on the Physical Structure, Permeability, and Hysteresis of Steel," R. J. Webber.
- "The Electron Theory of Metallic Conduction," (introducing discussion), A. W. Smith.
- "The Effect of Changes in Water Resistance and Dielectrics on the Vibrations of a Lecher System," Geo. W. Gorrell.
- "Exhibit of Apparatus for Electric Waves: (1) Drude Apparatus for Refractive Index of Electric Waves. (2) A Wavemeter for Wireless Frequencies," A. D. Cole.
- "Some Additions to the Known Orthopterous Fauna of Ohio," W. J. Kostir.
- "Ohio Spiders," W. M. Barrows.
- "The Egg Capsules of a Bdelloidrilid on the Crayfish," Stephen R. Williams.
- "Observations on the Life Histories of Jassidæ and Cercopidæ," Herbert Osborn.
- "Habits and Food of the American Toad," Rees Philpott.
- "Note on the Occurrence of *Demodex folliculorum* var. *bovis* in Ohio," D. C. Mote.
- "Arrangements of the Muscles in the Mouth Parts of Embryo Cockroaches and its Bearing on the Phylogeny of the Hexapoda," L. B. Walton.
- "Winter Record of King Rail in Ohio," Edward L. Rice.
- "On the Synthesis of Proteins," A. M. Bleile.
- "Additions to the List of Heteroptera of Ohio," Carl J. Drake.
- "The Cranial Nerves of an Embryo Shark," F. L. Landaere.
- "Myxomycetes of Northern Ohio," E. L. Fullmer.
- "The Forest Types of the Ohio Quadrangle," Forest B. H. Brown.
- "New and Rare Plants Added to the Ohio List in 1914," John H. Schaffner.
- "A Provisional Arrangement of the Ascomycetes of Ohio," Bruce Fink.
- "The Collemaceae of Ohio," Bruce Fink.
- "Notes on Ohio Higher Fungi," Wilmer G. Stover.
- "The Leaf Mold Disease of Tomato (*Cladosporium fulvum*)," Wilmer G. Stover.
- "Summit County Marl," Chas. P. Fox.
- "History of the Olentangy River Below Delaware, Ohio," L. G. Westgate.
- "The Physiography of Mexico," Warren N. Thayer.
- "Notes on Some Richmond Fossils," W. H. Shideler.
- "The Classification of the Niagaran Formations of Western Ohio," Charles S. Prosser.
- "The Defiance Moraine in Relation to Pro-Glacial Lakes," Frank Carney.
- "Some of Dr. H. Herzer's Last Fossil Descriptions," W. N. Speckman.
- "On the Origin of Oolite," Walter N. Bucher.
- "Magnetic Rays" (introducing discussion), L. T. More.
- "On the Free Vibration of a Lecher System," F. C. Blake and Charles Sheard.
- "Measurements of the Magnetic Field," Samuel R. Williams.
- "On the Radioactive Deposit from the Atmosphere on an Uncharged Wire," S. M. J. Allen.
- "Demonstration of Simple Harmonic Motion on Rotation Apparatus," Charles Sheard.

Demonstrations

A Nematode Parasite of *Cryptobranchus*, F. H. Kreckler.

Cross Sections Illustrating Rate of Tree Growth, William R. Lazenby.

Varieties of Domestic Guinea-Pigs, W. M. Barrows.

Tailless Cat, W. M. Barrows.

Orthoptera not Hitherto Recorded from Ohio, W. J. Kostir.

A Scale of Ohio Forest Types to Indicate the Fertility of Soil for Agricultural Crops, Forest B. H. Brown.

Photographs of Leaf Hoppers and Frog Hoppers, Herbert Osborn.

EDWARD L. RICE,
Secretary

DELAWARE, OHIO,
December 5, 1914