

organism was recovered in pure culture from the lungs of these inoculated animals. The bacillus is also highly virulent for rabbits, killing them often within twenty-four hours.

No exact identification of the organism or organisms concerned in this epidemic can be offered, although in general they are very closely related to the rabbit septicæmia group. The bacteriological studies, for which I am greatly indebted to Mrs. Julia T. Parker, were not carried to completion but they show that although the gram negative bacilli found in all the cases were morphologically identical, they differed somewhat in their fermentation reactions and did not, except in the case of the homologous strain, agglutinate with the one specific serum produced in a rabbit. The latter result may be because of an unfortunate choice of one aberrant strain for the production of the serum or it may be because the various strains occurred in different species of reptile.

Since this was a well-defined epidemic of pneumonia affecting a variety of reptiles it seems probable that the original infecting organism may have acquired slightly different biological characters in its growth in different species.

G. A. MACCALLUM

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THE OHIO ACADEMY OF SCIENCE

THE thirty-first annual meeting of the Ohio Academy of Science was held at Western Reserve University and Case School of Applied Science, Cleveland, March 25 and 26, 1921, under the presidency of Mr. W. H. Alexander, of the United States Weather Bureau, Columbus. Fifty-nine members were registered as in attendance; forty-seven new members were elected.

An excursion, organized in connection with the meeting, was carried out by the Section for Geology on May 28, 29, and 30. The itinerary (Wilmington, Clarksville, Fort Ancient, Oregonia, Dayton) was planned for the study of the Richmond formations of southwestern Ohio. The party of fifteen geologists was under the guidance of Drs. August Foerste and W. H. Shideler.

The trustees reported a gift of two hundred and fifty dollars from Mr. Emerson McMillin, of New York City, in furtherance of the research work of the Academy.

The death of one member was reported: Mr. Thomas Piwonka, of Cleveland. Mr. Piwonka was born of Bohemian stock in New York City, September 10, 1854; he died May 9, 1920. His membership in the Academy began in 1893. The obituary notice, prepared by Professor J. E. Hyde, closes with these words: "His life work was law, but in spare moments he was a naturalist with particular interest in geology, botany and microscopy. His passing removes one more (very few are left!) of that generation of men interested in the natural history of their locality, with the collector's keen instinct, to which paleontology is profoundly indebted. With them is passing a phase of our culture."

Another of the older members of the academy, Professor G. Frederick Wright, of Oberlin, died on April 20, less than a month after the meeting. His name appears on the program; but he was too ill to be present, and the paper was read by another. He had been a member since 1892.

Officers were elected as follows: *President*, R. C. Osburn, Ohio State University; *Vice-presidents*: Zoology, J. E. Kindred, Western Reserve University; Botany, E. N. Transeau, Ohio State University; Geology, J. E. Hyde, Western Reserve University; Physics, W. G. Hormell, Ohio Wesleyan University; Medical Sciences, F. C. Waite, Western Reserve University; Psychology, Rudolph Pintner, Ohio State University (since removed to Teachers College, Columbia University); *Secretary*, E. L. Rice, Ohio Wesleyan University; *Treasurer*, A. E. Waller, Ohio State University.

The scientific program was as follows:

PRESIDENTIAL ADDRESS

Thunderstorms: especially those of Ohio: Mr. W. H. ALEXANDER, U. S. Weather Bureau, Columbus.

PUBLIC LECTURES

Hookworm and human efficiency: PROFESSOR CHARLES A. KOFOID, University of California.
Scientific work at the Ohio Bureau of Juvenile Research: DR. HENRY H. GODDARD, Ohio Bureau of Juvenile Research, Columbus.

PAPERS

The new Cleveland Museum of Natural History: PAUL M. REA.
The state park situation in Ohio: J. ERNEST CARMAN.
Chronological view of men of science: J. A. CULLER.

- A peculiar case of stature inheritance:* A. B. PLOWMAN.
- A differential sensitivity theory of time and space and its bearing on evolution:* L. B. WALTON.
- The relation of the biologist to public health administration:* A. B. PLOWMAN.
- The function of the striæ and the origin of bilateral symmetry in the euglenoids:* L. B. WALTON.
- The geographical distribution of the genera of the Opalinidæ:* MAYNARD M. METCALF.
- Hemiptera of the Adirondacks:* HERBERT OSBORN.
- Collecting in southern Florida:* HERBERT OSBORN.
- Some studies in Hessian fly emergence:* T. H. PARKS.
- Notes on the habits and life history of Galeatus peckhami Ashm.:* CARL J. DRAKE.
- A new Ambrosia beetle: notes on the work of Xyloterinus politus Say:* CARL J. DRAKE.
- Phylogeny and distribution of the genus Libellula:* CLARENCE H. KENNEDY.
- Aids in teaching elementary cytology:* Z. P. METCALF.
- The cytology of the seaside earwig, Anisolabis:* S. I. KORNHAUSER.
- Copulation in Planaria maculata:* R. A. BUDINGTON.
- On the regulative capacity of the neural tube:* H. L. WIEMAN.
- The musculature of the head and throat of Chimeria ogilvyi:* MAE FRIEDLANDER.
- New models of the development of the heart in the chick:* BRADLEY M. PATTEN.
- Some features of the morphology of the kidney of Necturus:* S. W. CHASE.
- Orientation in the cat:* FRANCIS H. HERRICK.
- Diet of a captive mole:* E. L. MOSELEY.
- Additions to the birds of Ohio:* LYNDY JONES.
- Phagocytosis and clotting in the perivisceral fluid of Arbacia:* J. E. KINDRED.
- Further observations as to the effect of thyroid substance on plant protoplasm:* R. A. BUDINGTON.
- The origin and development of the prairie in North America:* H. C. SAMPSON.
- The significance of native vegetation in crop production:* A. E. WALLER.
- Energy relations of an acre of corn:* E. N. TRANSEAU.
- Some energy relations of aquatic life and their significance:* L. H. TIFFANY.
- Contributions to the genetics and cytology of parthenogenetic Taraxaca:* PAUL B. SEARS.
- Reversal of the sexual state in Japanese hop:* J. H. SCHAFFNER.
- The occurrence and abundance of certain algae in Lake Erie:* MALCOLM E. STICKNEY.
- The census of flowering plants on certain small islands of Lake Erie:* MALCOLM E. STICKNEY.
- Causes and consequences of the irregularities in the glacial border in the Ohio Valley:* G. FREDERICK WRIGHT.
- Explorations in eastern Bolivia:* K. F. MATHER.
- Some sub-surface rock channels filled with glacial material:* J. ERNEST CARMAN.
- A fault-zone breccia in the Bass Island series:* J. ERNEST CARMAN.
- A disconformable contact at the base of the Sylvan sandstone:* J. ERNEST CARMAN.
- The Ordovician and Silurian seas of American arctic and subarctic regions and the relation of their faunas to contemporaneous seas of European areas:* AUGUST FOERSTE.
- Some coastal geology of southern Florida:* G. F. LAMB.
- An interpretation of some Ohio geology:* G. F. LAMB.
- Richmond Ostracoda of especial interest:* W. H. SHIDELER.
- Additions to our knowledge of the Arnheim:* W. H. SHIDELER.
- A Pliocene brackish water fauna near Alexander, La.:* E. R. SMITH.
- A modification of Hobbs's method of teaching interpretation of geologic maps:* E. R. SMITH.
- An embryonic volcano in Adams County, Ohio:* WALTER H. BUCHER.
- Local geology of Cleveland from an economic standpoint:* FRANK R. VAN HORN.
- The reopening and the end of the Linton (Ohio) Coal-measures fossil-amphibian locality:* J. E. HYDE.
- The fauna of the Berea Grit; a recurrent Bedford fauna, and its bearing on the age of the Bedford:* J. E. HYDE.
- Some psychology applied to Americanization:* GARRY C. MYERS.
- Scientific direction of childhood,—America's greatest social and political responsibility:* HERMAN H. YOUNG.
- Reliability of survey methods in individual diagnosis:* FLORENCE FITZGERALD.
- Limiting factors in human behavior:* A. P. WEISS.
- Waste of mental ability in our school system:* HELEN MARSHALL.
- (a) *Some studies in progress in the Cleveland School of Education:* (b) *Some data on learning curves:* GARRY C. MYERS.
- College men in the penitentiary:* CARL MURCHISON.
- A preliminary report on retroactive inhibition (with particular reference to two conditions):* E. B. SKAGGS.
- The measurement of psychological effects of fatigue and low oxygen:* F. C. DOCKERAY.
- Discussion of the legal status of psychology in Ohio State:* led by H. AUSTIN AIKINS.

DEMONSTRATIONS

- Chromosomal complexes of Anisolabis:* S. I. KORNHAUSER.
- Geographic distribution maps of the Opalinidæ and their hosts:* MAYNARD M. METCALF.
- New models of development of the heart in the chick:* BRADLEY M. PATTEN.
- Chart and data relating to an interesting case of stature inheritance:* A. B. PLOWMAN.
- Multiple ova in Graafian follicles of cat:* EDWARD L. RICE.
- Sulphur dioxide injury to vegetation:* A. E. WALLER.
- Illustrations of euglenoids:* L. B. WALTON.

EDWARD L. RICE,
Secretary

DELAWARE, OHIO