contracted, some completely so that they form dense spherical masses; others are only partially contracted. This is in accord with what may be observed in the tail of the living silvery tadpole. Another feature which immediately attracts attention is the apparent absence of the epidermal melanophores. Upon closer examination the faint outlines of a few such cells may be made out. The cells contain very few pigment granules. Whether the remaining cells have migrated from the epidermis to deeper parts, as stated by Allen, or whether they have become invisible from loss of pigment granules could not be determined. It is apparent, however, that those occasional epidermal melanophores which may be identified contain only a small proportion of the number of pigment granules to be found in the normal condition. Whether the pigment granules have been changed and absorbed or have left the melanophore to become more widely distributed likewise has not as yet been established.

When a silvery larva has been darkened by the action of an extract of pars intermedia the sub-epidermal melanophores are found to be expanded, thus approximating the normal condition. The epidermal pigment cells, however, are not restored.

It may be concluded, then, that the change in color which follows hypophysectomy in the frog larva is due primarily to a contraction of the sub-epidermal melanophores. Only secondarily is it due to a loss of pigment granules from certain of the epidermal melanophores, and to a possible migration or loss of other epidermal melanophores.

WAYNE J. ATWELL

DEPARTMENT OF ANATOMY, UNIVERSITY OF BUFFALO

THE PALEONTOLOGICAL SOCIETY

The Paleontological Society held its tenth annual meeting at Baltimore, December 28, 1918, meeting in affiliation with the Geological Society of America. The meeting was held in the civil engineering building of Johns Hopkins University, with an attendance of about forty members and visitors. Following the business session and the

presentation of appreciations of the life and work of four deceased members, the reading of papers bearing upon the various branches of paleontology and stratigraphy was commenced and continued until late in the afternoon. In the evening the members attended the annual dinner with the Geological Society of America at the Southern Hotel.

Of special mention among the papers presented, listed below, was the address of the retiring president, Dr. F. H. Knowlton, on "The evolution of geologic climates," in which the evidence of paleobotany was the predominant theme, and the papers on the Philosophical Aspect of Paleontology and the Economic Value of the Science. Important stratigraphic and paleontologic results were announced by the members particularly regarding the Coal Measures of Maryland, the Oxfordian of Cuba and the Tertiary rocks of South America.

The following papers were read:

Paleontologic Papers

Relation of the Holochoanites and the Orthochoanites to the Protochoanites, and the significance of the Bactritidæ: Amadeus W. Grabau.

On the inclusion of the Pleistocenic period in the Psychozoic Era: Amadeus W. Grabau.

The philosophical aspects of paleontology: John M. Clarke.

Characters and restoration of Cope's Sauropoda: HENRY FAIRFIELD OSBORN.

Camarasaurus and Amphicælias from Canyon City: Henry Fairfield Osborn and Charles C. Mook.

Orthogenetic development of the costa in the Perisphinctina: Marjorie O'Connell.

Discovery of the Oxfordian in western Cuba: BARNUM BROWN and MARJORIE O'CONNELL.

A new Eurypterid horizon: George H. Chadwick.

The economic value of paleontology: RALPH ARNOLD

Stromatopora growth on edgeon conglomerates from the Silurian: John M. Clarke.

Stratigraphic Papers

The age of certain plant bearing beds and associated marine formations in South America: EDWARD W. BERRY.

The stratigraphy and correlation of the coal measures of Maryland: Charles K. Swartz, W. A. Price, Jr., and Harvey Bassler.

The typical section of the Allegheny formation: Charles K. Swartz and Harvey Bassler.

The Eocene divisions of California: BRUCE L. CLARK.

Some problems of the Adirondack Precambrian: HAROLD L. ALLING.

Permo-Triassic of northwestern Arizona: Harvey W. Shimer.

The stratigraphy and structure of the Newark system in Maryland and its relation to the Newark system of eastern North America: George Edwin

Remarkable persistence of thin horizons: George H. Chadwick.

Portage stratigraphy in western New York: GEORGE H. CHADWICK.

The result of the ballots for officers for 1919 was as follows:

President—Robert T. Jackson, Peterborough, N. H.

First Vice-president—Gilbert Van Ingen, Princeton, N. J.

Second Vice-president—Walter Granger, New York City

York City.

Third Vice-president—T. Wayland Vaughan, Washington, D. C.

Secretary—R. S. Bassler, Washington, D C.. Treasurer—Richard S. Lull, New Haven, Conn. Editor—W. D. Matthew, New York City.

> R. S. Bassler, Secretary

THE AMERICAN PSYCHOLOGICAL ASSOCIATION

THE American Psychological Association held its twenty-seventh annual meeting at Johns Hopkins University on December 27 and 28. Considering the fact that many of the members made other plans when it was announced in November that there would be no meeting, the sessions were very well attended, there being about seventy members present. Owing to illness the president, Professor J. W. Baird, of Clark University, was not able to preside nor to give his presidential address.

The papers consisted with one exception of descriptions of the war activities of the members. The program was as follows: Research in psycho-pharmacology, Dr. David I. Macht; Study of ocular functions with special reference to aviation, Professor C. E. Ferree; Revision of the definition for "moron"; Captain R. L. Sylvester: Psychology of morale, Major Wm. S. Foster; Selection and training of telegraphers, Professor L. L. Thurston; Some problems of reeducation, Professor S. I. Franz; Principles underlying the classification of men in the Students' Army Training Corps, Professor T. L. Kelley; Examination of the emotional fitness for warfare, Professor R. S. Woodworth; Practical application of army trade tests, Major J. W. Hayes; Army personnel work: implications for education and industry, Lieutenant Colonel W. V. Bingham; The work of the psy-

chological committee of the National Research Council and of the Division of Psychology, Major R. M. Yerkes: Methods of mental testing used in the United States Army, Major Lewis M. Terman: Psychological service in army camps, Major George F. Arps; Results and values of psychological examining in the United States Army, Dr. Mabel R. Fernald; The relation of intelligence to occupation as indicated by army data, Dr. J. W. Bridges: Some possible effects of the war on American psychology, President G. Stanley Hall; Functions of psychology in rehabilitation of disabled soldiers, Major Bird T. Baldwin; A program for mental engineering, Lieutenant Commander Dodge; Official method of appointing and promoting officers in the Army, Colonel Walter Dill Scott; Psychological investigations in aviation, Major Knight Dunlap: Speech reconstruction in soldiers, Professor W. B. Swift.

Saturday afternoon there was a symposium upon "The future of pure and applied psychology." Professor Thorndike expressed the opinion that in twenty years there would be as many "doing" as teaching psychology, but that both groups must be thoroughly scientific. He saw no reason why the Ph.D. degree in psychology should not represent both types. President Hall stated that psychology should be kept pure, but not so pure that it could not be helpful. Its motto should be "service" in the best sense of the term. Major Yerkes discussed the future relation of psychology to a permanent National Research Council.

Professor E. L. Thorndike, as the retiring vice-president of Section H of the American Association for the Advancement of Science, delivered an address upon "Scientific personnel work in the army" and Professor E. F. Buchner as retiring vice-president of Section L of the American Association for the Advancement of Science spoke upon "Scientific contributions of the educational survey."

A brief report of the contents of all the papers will be made in the February number of *The Psychological Bulletin*.