

interesting communication from the Barnard Skin and Cancer Hospital in which Dr. Leo Loeb describes experiments with colloidal copper, derived by the Bredig method, upon neoplastic growths; he finds that intravenous injections cause cessation and absorption of the cancerous tissue.

MAX MORSE

TRINITY COLLEGE,  
October 25, 1912

### SOCIETIES AND ACADEMIES

#### THE AMERICAN PHILOSOPHICAL SOCIETY

At a meeting of the society on February 7 Dr. Paul Heyl presented a paper on "Platinum in North Carolina." A belt of platinum-bearing rock runs from Danville, Va., to Cedar Falls, N. C., a distance of some seventy miles. Assays of as much as 4 or even 8 ounces per ton are occasionally found, but the average content is too small to be commercially important. The platinum in the rock is very rich in iridium. The deposit has been known for about seventeen years. An examination of the watershed of the region for 200 miles from the center for placers yielded negative results.

On March 7 the following paper was presented: "A Historical Account of the Early Microscopical Studies in the Structure of Animals and Plants with Reference to the Development of the Cell Theory," illustrated by lantern slides, by R. M. Pearce, professor of research medicine, University of Pennsylvania.

A sketch of the work of Hooke, Malpighi, Grew, Swammerdam and Leeuwenhoek in the last third of the seventeenth century, with remarks on the early microscopes, followed by the story of the development of our knowledge of plant and animal structure, as Lieberkuhn's (1739-48) studies of the finer structure of animal tissue, Trembly's (1744-47) observations on the division of protozoa, Brown's (1833) description of the nucleus and Treviranus's (1806) and Mohl's (1828) studies of the vegetable cell. A discussion of the improvements in the microscope up to 1830 and of the fundamental observations of Schleiden (1838) and Schwann (1839) which, followed by those of Virchow (1858), definitely established the cell theory. A short discussion of later work on the nature of cell protoplasm (Dujardin, Schultze) and the study of the nucleus and the process of division of cells, concluding with Flemming's observations in 1882. Illustrated by lantern slides showing

many of the original drawings which accompanied the reports of the various fundamental observations.

#### THE BIOLOGICAL SOCIETY OF WASHINGTON

THE 33d annual meeting was held in the hall of the Cosmos Club, December 14, 1912, with Vice-president W. P. Hay in the chair. Reports of officers for the year 1912 were received and the annual election of officers took place. The election resulted as follows:

*President*—E. W. Nelson.

*Vice-presidents*—J. N. Rose, Paul Bartsch, W. P. Hay, A. D. Hopkins.

*Recording Secretary*—D. E. Lantz.

*Corresponding Secretary*—N. Hollister.

*Members of Council*—Hugh M. Smith, Vernon Bailey, Wm. Palmer, A. B. Baker and A. K. Fisher.

THE 505th regular meeting was held January 11, 1913, with President E. W. Nelson in the chair and 54 persons present. The chairman appointed standing committees on publications and communications for the year.

C. V. Piper exhibited a vase made of wood and covered with a thin veneer of "silk-wood." This veneer is cut from one of the large *Polyporus* fungi and takes a beautiful polish.

A. S. Hitchcock and E. W. Nelson each reported his recent return from a successful collecting trip, the former having collected grasses in Jamaica, Trinidad and Tobago, while the latter had secured birds and mammals in Arizona.

The regular program consisted of three communications:

*The Rediscovery of *Oenothera grandiflora**: S. M. TRACY.

The speaker gave an account of two trips made by him to the locality of Bartram's original discovery of this species (1776). The locality is near Dixie Landing, Alabama, and the flower described by Bartram was found abundant over a limited area. A second visit was made last year in company with Dr. Hugo de Vries.

*The Problem of the Identity of *Oenothera Lamarckiana**: H. H. BARTLETT.

The speaker gave a history of various cultivated strains of plants of this species and its hybrids. He predicted that its original habitat and identity—as yet unknown—would eventually be discovered, probably in America south of the United States and on the Pacific Slope.

*Sawflies and their Relations to Forestry:* S. A. ROHWER.

These very destructive insects were classed as defoliators and wood borers, and many instances of serious damage by them to growing timber were given. The paper was illustrated by numerous lantern slides showing various species of sawflies—adults, pupæ and larvæ—and also illustrations of damaged timber.

THE 506th regular meeting was held January 25, 1913, with the president in the chair and 47 persons present.

The following resolution relating to zoological nomenclature was presented to the society with the endorsement of the council and adopted unanimously:

Whereas certain zoologists have gone on record as favoring

1. A permanent and increasing list of exceptions to the law of priority,

2. A return to the principle of elimination regardless of the generic types that have been designated under the rules, and

3. A rejection of the present unanimous vote rule that has obtained for so many years in the International Congress on Zoological Nomenclature.

Therefore, be it resolved by the Biological Society of Washington that we favor

1. The consistent application of the law of priority in all cases,

2. The acceptance of the first designation of a genotype, regardless of the method followed in designating it, and

3. The present unanimous vote rule as making for conservation and stability in nomenclature.

Under the heading Brief Notes, etc., Paul Bartsch exhibited a small photographic camera, with a number of small pictures made with it and enlargements of the same. He spoke briefly of its convenience and adaptability to field uses.

Barton W. Evermann reported that a wireless message had just been received from Agent Lembeck at the Pribilof Islands in which it was stated that the reindeer herds on St. Paul and St. George had increased during the past year from 37 to 65 animals and that all are in excellent condition.

The regular program consisted of two communications:

*Notes on the Biology of the Common Termites of the Eastern United States:* THOMAS E. SNYDER.

This paper was illustrated by many lantern slides and was discussed by E. A. SCHWARZ.

*The Biting Powers of Ants:* W. L. MCATEE.

The speaker's personal observations as well as instances gathered from many sources were cited to show the powers of these small animals. Messrs. E. A. Schwarz, A. C. Weed, A. D. Hopkins and the author of the paper took part in the discussion which followed.

THE 507th regular meeting was held February 8, with President Nelson in the chair and 57 persons present.

Professor Burt G. Wilder gave an illustrated lecture on "The Brain as a Guide to the Affinities of Vertebrates," basing his remarks primarily on the brain of the shark *Pentanchus* recently described by Smith and Radcliffe as the type of a new family. The speaker showed by means of diagrams the evolution of the selachian brain from the most primitive form found in *Chlamydoselachus* through the other Notidani to the typical sharks; and announced his conclusion, from the evidence afforded by the brain, that *Pentanchus* is not a notidanid. He did not venture, however, to say just what the systematic position of this shark may be until the vertebræ and intestine have been studied, although it is certainly not related to the Scylliorhinidæ, to which Regan<sup>1</sup> assigns it on the theory that the single dorsal fin is an abnormality.

In the discussion which followed, H. M. Smith said that in assigning *Pentanchus* to the order of ancient sharks, partly on account of the single dorsal fin, he and Mr. Radcliffe had been aware of characters in which this shark differs from typical Diplospondyli, but that no other course seemed expedient at the time the preliminary description was published. The vertebræ, while not diplospondylous, but modified cyclospondylous, are of a very primitive type, being only half the size of those in a scylliorhinid shark of the same length, with an extremely small centrum and a very large neural canal.

Theodore Gill discussed the subject at length, and agreed with Professor Wilder in attaching great taxonomic importance to the brain in sharks and rays. He had concurred in the assignment of *Pentanchus* to the Notidani, and now regarded it as the type of a peculiar family whose affinities remain to be determined.

D. E. LANTZ,  
Recording Secretary

<sup>1</sup> SCIENCE, July 19, 1912.