

have their optic associations. In fishes even he has already demonstrated an indirect connection between the optic tectum and the axial lobe, which latter must be regarded as functionally and probably morphologically equivalent to the cortex of the higher forms.

In a second editorial Prof. Herrick discusses *Neurology and Monism*. He advocates a *dynamic monism* which stands in strong contrast with the analytical monism of Lloyd Morgan, as presented especially in his recent work on Comparative Psychology. Interesting applications are hinted at in the field of algedonics.

The concluding sixty pages of the number are devoted to book reviews and the bibliography of the half-year past.

#### SOCIETIES AND ACADEMIES.

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, JANUARY 7, 1896.

DR. BENJAMIN SHARP made his second communication on the ethnology of Alaska and Siberia, based on collections made by him the past summer during the cruise of the U. S. Revenue Cutter 'Bear.' He described a large collection of instruments, weapons and household utensils and exhibited a number of lantern illustrations.

A minute of the Academy's appreciation of the clearness of judgment, knowledge of affairs and courtesy of personal intercourse which had been the characteristics of the administration of the retiring President, General Isaac J. Wistor, was adopted.

JANUARY 14.

A paper entitled 'New Species of the Halicoid Genus *Polygyra*,' by Henry A. Pilsbry, was presented for publication.

MR. HENRY A. PILSBRY exhibited and described a specimen of *Pleurotomaria* from Mullica Hill, N. J. It resembles *P. solariformis* and *P. perlata*, but is much more discoidal and is probably the imperfectly described *P. crotaloides* of Morton.

JANUARY 21.

Papers under the following titles were presented for publication: 'Descriptions of New Species of Mollusks,' by Henry A. Pilsbry;

'The Molting of Birds, with special reference to the Plumages of the Smaller Birds of eastern North America,' by Witmer Stone.

MR. EDW. GOLDSMITH described a peculiar crystallization as the result of long-continued evaporation of solutions of Iodide of Potassium. The crystalline form is hexagonal and resembles that which has been obtained from kelp liquids.

PROF. EDW. D. COPE exhibited and described the remains of fossil Balenidæ, of which he had determined sixteen species from the Neocene of Maryland, Virginia and North Carolina. The ear bones of an apparently undescribed Balænoptera and of a Balæna, apparently identical with affinis, were also described.

A resolution was adopted urging on the attention of the Smithsonian Institution the desirability of continuing the rental of a table at the Naples Zoölogical Station for the benefit of American students of biology.

JANUARY 28.

A paper entitled 'Contributions to the Zoölogy of Tennessee, No. 3, Mammals,' by Samuel N. Rhoads, was presented for publication.

The newly elected President, Dr. Samuel G. Dixon, resigned the professorship of histology and microscopic technology in consequence of increase of executive duties.

DR. BENJAMIN SHARP continued his communication on the ethnology of Alaska, based on collections made by him during last summer's cruise of the U. S. Revenue Cutter 'Bear.'

In continuation Dr. D. G. BRINTON spoke of the supposed influence of Asiatic emigration on the primitive civilizations of America. Reviewing the subject as illustrated by languages, myths, industries, arts and physical characteristics of the tribes, he expressed the belief that there was no reason to suppose that any such influence had been exerted. He was aware that in holding this belief he stood almost alone among American ethnologists, although his views were in harmony with those of some of the best European authorities.

A special committee of the Entomological Section of the Academy reported a mode of exterminating the tussock moth, *Orgyia leucostigma*, with which the trees of the city streets and squares are so badly infested.

## FEBRUARY 4.

PROF. CARTER, of the High School, described a tree about eighteen feet long and ten inches in diameter from ten feet below the surface of a sandstone quarry in Montgomery county, Pa., which had been turned into iron. The Hæmatite had been entirely leached out of the sand in the vicinity of the tree.

MR. F. J. KEELEY described the characters of a microscopic preparation of jade. It was of interest in connection with the ethnological discussion at the last meeting, as Dr. Brinton believed that American jade could be distinguished from the Asiatic mineral by its microscopic characters.

## FEBRUARY 11.

A letter was read from Dr. Karl A. von Zittel, expressing in complimentary terms his gratification at the action of the Academy in conferring upon him this year the Hayden Memorial Geological Award.

Papers under the following titles were presented for publication: 'The Earliest Record of Arctic Plants,' by Theodore Holm; 'A Note on a Uniform Plan of describing the Human Skull,' by Harrison Allen.

PROF. COPE exhibited and described a portion of a cetacean cranium from the Neocene beds of the western shore of the Chesapeake Bay. For a whalebone whale, which it probably was, the frontal and parietal bones are of an unusual character. The presence or absence of dentition had not been determined. The specimen indicated a new genus and species for which the name *Metopocetus durinasus* was proposed.

EDW. J. NOLAN,  
Recording Secretary.

## BIOLOGICAL SOCIETY OF WASHINGTON, 255TH MEETING, SATURDAY, FEBRUARY 8.

F. V. COVILLE exhibited specimens of a poisonous cactus *Anhalonium Lewinii* from Ensinall Co., Texas, stating that the tops were sliced and dried and used by the Indians as an intoxicant and stimulant during their religious dances. The cactus was a spineless species and its poisonous juice was apparently for protection.

CHARLES L. POLLARD exhibited a specimen of a desert milkweed, *Asclepias albicans* and commented on its adaptation to desert conditions.

DAVID WHITE exhibited specimens and spoke at some length on 'Some New Forms of Palæozoic Algæ from the Central Appalachian Region.' For one of these a delicate ribbon-like dichotomous and spirally-twisted organism, which seemed unique in some respects, the new generic name *Spirophycus* was suggested. Another form, which, like the preceding, was found near the top of the Lower Carboniferous along New River, W. Va., seemed to belong to the group of Devonian Algæ for which Pantallon in 1893 revived Brongniart's genus *Dictyotites*. But this name having long ago become a synonym, was rejected by the reader who proposed to substitute for Dr. Penhallow's group the name *Dictyotopsis*.

Charles L. Pollard read a paper entitled 'Observations on the Flora of the District of Columbia,' and enumerated a list of 17 plants new to the Washington flora, in addition to those recorded in a previous paper by Mr. Holm. About one-third of these consisted of weeds introduced in ballast or cultivated grounds; an equal proportion contained stray escapes from cultivation chiefly in the public parks, while the remainder comprised species hitherto overlooked or possibly actual accessions to the flora. The author also commented on the structure and relationship of the anomalous *Phacelia Covillei*, giving the views of various botanists upon the species, and showing the proposition that it is a hybrid between *P. parviflora* and *Macrocalyx nyctelea* to be untenable.

F. A. LUCAS,  
Secretary.

## THE PHILOSOPHICAL SOCIETY OF WASHINGTON.

THE Philosophical Society of Washington held its regular meeting on February 15th, at which the following papers were presented: *An Expedition to Seriland*, by W J MCGEE.

The *Thermophone*, by A. M. RITCHIE, of Boston.

This is a new instrument for measuring temperatures. It is an electrical thermometer of the resistance type, using two resistance coils of different metals. The description was illustrated by an exhibition of the instrument itself.

W. J. DALL described *Some Characteristics of the Genus Spirula*.

J. HOWARD GORE read a paper on *The Groningen Land-lease System*, being one of perpetual lease to tenants and heirs. Groningen is one of the most prosperous provinces of the Netherlands.

BERNARD R. GREEN,  
Secretary.

MEETING OF THE NEW YORK SECTION OF THE  
AMERICAN CHEMICAL SOCIETY.

THE New York Section of the American Chemical Society held its regular meeting at the College of the City of New York on Friday evening, the 7th inst.

The programme announced a paper by Dr. R. G. Eccles on 'New Facts about Calycanthus,' and 'Items of Interest from the Cleveland Meeting,' by Prof. A. A. Breneman.

Dr. Eccles stated that the calycanthus seeds, on which his work had been done, were from Tennessee, where they were considered as being poisonous.

He had separated from them an alkaloid different from and more peculiar than any alkaloids known to chemists.

The seeds contain one-third their weight of a bland, pale yellow fixed oil. This oil is wholly removable by petroleum ether. When freed from oil and placed in water the seeds ferment, and the separated alkaloid gives the following reactions: Green color, by strong nitric acid. Pale canary, by hydrochloric acid. Red, by sulphuric acid and bichromate of potash.

Heated with strong caustic potash, a new alkaloid was developed and a sweetish odor produced.

Dr. H. W. Wiley had also examined the seeds, and had found that the alkaloid produced a fine purple color with cane sugar and sulphuric acid. The seeds themselves contain enough sugar to give this reaction. A single seed beaten up with a few drops of water yields the fine purple color on addition of a drop of sulphuric acid.

Ether alone will only extract a trace of alkaloid from the seeds, but a mixture of ether, alcohol and ammonia gives a complete extraction.

The author had isolated two alkaloids, the

second in smaller quantity, and a third alkaloid has been found by Dr. Wiley.

The calycanthus-alkaloid gives different colored reaction from the salts.

The means of a series of combustions by Dr. W. A. Noyes gave the following result:

|                |        |
|----------------|--------|
| Carbon.....    | 71.56  |
| Nitrogen.....  | 15.26  |
| Hydrogen ..... | 8.34   |
| Oxygen .....   | 4.84   |
|                | <hr/>  |
|                | 100.00 |

Dr. Noyes believes the formula to be  $C_{17}H_{23}N_3O$ .

Its specific rotary power is exceedingly high, being ten times that of cane sugar.

The sulphate is a white prismatic salt giving yellow oxidation products when heated in a sealed tube with nitric acid.

The author described the various salts which he had prepared, and exhibited the color reactions with both the salts and the alkaloids.

Prof. Breneman's review of the Cleveland meeting had been postponed, owing to the length of programme at the January meeting of the section.

The work of Prof. Maberry on oils, his laboratory and apparatus for conducting the protracted distillations of oils under reduced pressure were briefly described.

Dr. Durand Woodman exhibited a simple lecture table apparatus for experimentally demonstrating the luminosity of the acetylene flame. The meeting was then adjourned until March 6th.

DURAND WOODMAN,  
Secretary.

NEW BOOKS.

*Primary Factors of Organic Evolution.* E. D. COPE. Chicago and London, The Open Court Publishing Co. 1896. Pp. xvi+547. \$2.00.

*Greenland Icefields and Life in the North Atlantic.* G. FREDERICK WRIGHT and WARREN UPHAM. New York, D. Appleton & Co. 1896. Pp. xv+407. \$2.00.

*Die Insel Tenerife.* HANS MEYER. Leipzig, G. Mieser. 1896. Pp. viii+328.

*Elements of Botany.* J. Y. BERGEN. Boston and London, Ginn & Co. Pp. viii+57.