

and in every instance the swollen stems of rusted blueberry grew among or just beneath the infected leaves.

The delicate peridium disappeared in a few days after the escape of the spores, or the infected leaves curled up and fell from the tree. Several collections were made during the summer, the last being on August 15.

W. P. FRASER

PICTOU, N. S.

THE SMOOTH HOUND, AND SOME OTHER FISHES IN NEW JERSEY

AMONG a collection of fishes made during the past season at Corson's Inlet, by Dr. R. J. Phillips, is an interesting foetal shark. It is one of six removed from a female which measured three feet nine inches, taken on May 16, and was attached to the uterus of the mother by a placenta. This fact is interesting in that it points to the alleged essential character distinguishing *Cynais* from *Mustelus*. Upon comparison with other examples from our Atlantic coast, and the types of *Mustelus equestris* Bonaparte (= *Mustelus mustelus*), I find no difference whatever, except as may be allowed due to age. The presence of a lateral cusp on each side of the median one, in the case of the teeth, is distinct in small specimens, but as they grow larger the outer or anterior teeth at least seem to be smoother. I shall therefore feel obliged to consider the common smooth hound along the New Jersey coast to be *Mustelus mustelus*, thus substantiating Dr. Günther's record for New York in 1870. A fine small example of *Elops saurus*, the first definite record for this fish in New Jersey waters, was taken October 9. *Clupea harengus*, taken on June 6, is also the first definite record in New Jersey for that species. Other interesting species obtained are: *Eulamia milberti*, *Anchovia brownii*, *A. mitchilli*, *Kirtlandia vagrans laciniata*, *Menidia menidia notata*, *Mugil cephalus*, *M. curema*, *Selene vomer*, *Trachinotus falcatus*, *Pomatomus saltatrix*, *Orthopristis chrysopterus*, *Stenotomus chrysops*, *Micropogon undulatus*, *Menticirrhus americanus*, *Stephanolepis hispidus*, *Alutera schœpfi*, *Tetodon maculatus*,

Chilomycterus schœpfi, *Myoxocephalus æneus*, *Prionotus carolinus*, *P. evolans strigatus* and *Pseudopleuronectes americanus*.

HENRY W. FOWLER

ACADEMY OF NATURAL SCIENCES,
PHILADELPHIA, PA.,
November 6, 1909

SOCIETIES AND ACADEMIES

THE NEW YORK ACADEMY OF SCIENCES SECTION OF BIOLOGY

A REGULAR meeting of this section was held at the American Museum of Natural History on October 11, 1909. In the absence of Mr. Frank M. Chapman, chairman of the section, Professor N. L. Britton presided. The evening was devoted to a paper on "Common Mushrooms and How to Know Them," by Miss Nina L. Marshall.

Miss Marshall, who is the author of a popular book on mushrooms, exhibited a series of beautifully colored slides illustrating the principal types of mushrooms. She dwelt especially on the ecology of the different forms and on their economic importance to man. The distinctive characters of the poisonous and non-poisonous kinds were emphasized.

At the regular meeting held at the American Museum on November 8, 1909, Chairman Frank M. Chapman presiding, the following papers were read:

A Naturalist in the Straits of Magellan: Mr. CHAS. H. TOWNSEND.

The speaker gave an account of personal experiences in the Straits of Magellan while a member of a scientific expedition to that region several years ago. He spoke at length of the more interesting mammals, birds, fishes and plants seen or collected. The paper also dealt with the habits of the native tribes of that region. Those living along the more westerly channels of the straits go almost naked, subsist mainly on shell-fish and, in the speaker's opinion, are the lowest among primitive races of man. They are fast disappearing and should be carefully studied.

The paper was illustrated by lantern slides mostly from photographs by the author.

A Trip through Tropical Mexico: Dr. ALEXANDER PETRUNKEVITCH.

The author spent two months during last summer in the lowlands of tropical Mexico collecting arachnida and other invertebrates for the American Museum of Natural History. The paper

dealt with his experiences in the field. Many interesting forms were observed and collected, some of which the speaker exhibited.

L. HUSSAKOF,
Secretary

AMERICAN MUSEUM OF NATURAL HISTORY

THE ANTHROPOLOGICAL SOCIETY OF WASHINGTON

At the 435th regular meeting of the society, held October 26, 1909, the president, Dr. J. Walter Fewkes, spoke on "The Preservation of Cliff-dwellings," his remarks being illustrated with lantern slides.

"The preservation of cliff-dwellings," said the speaker, "is one aspect of a more comprehensive problem now attracting great attention, the conservation of our resources. The protection of the antiquities of our country is imperative, for if neglected much valuable material pertaining to prehistoric America will be destroyed by the elements or by vandals in a few years." Excavation and repair of cliff-dwellings are necessary not only to put these interesting relics of the past in such condition that tourists may obtain correct ideas of this type of prehistoric architecture but also to furnish students with data for comparative studies.

The two cliff-dwellings that already have been repaired by the government are Spruce-tree House and Cliff Palace, both of which ruins are situated in the Mesa Verde National Park, Colorado.

The field work of repair of cliff-houses under direction of the Secretary of the Interior was in charge of Dr. Fewkes, who was detailed for that work by the secretary of the Smithsonian Institution. The treatment of these ruins consisted of excavation and repair. The ideal is educational and no restoration was attempted. No changes were made in the skylines of the walls, the purpose of the work being to preserve as far as possible the picturesque characters of the ruins. The condition of Spruce-tree House and Cliff Palace before and after the operations was illustrated by lantern slides made from photographs taken from approximately the same places. The speaker pointed out the many difficulties encountered in the field work, as isolation of the ruins, scarcity of water and inaccessibility of the ruins from the top of the mesa. He dwelt especially on the magnitude of the work at Cliff Palace, the largest cliff-dwelling in the southwest, and on the discovery of buried terraces having retaining walls and ceremonial rooms in the talus in front of the secular rooms.

Both Spruce-tree House and Cliff Palace have been completely excavated and repaired so that a visitor can now walk without difficulty or danger from one end to the other through deserted courts, plazas and rooms, and readily examine all architectural features. All walls in danger of falling have been repaired and new foundations provided wherever necessary.

Dr. Fewkes also threw on the screen views of the large cliff-dwellings lately discovered in the Navaho National Monument in the neighborhood of Marsh Pass, northern Arizona. While the dimensions of some of these cliff-dwellings are not less than those of Cliff Palace, they lack the picturesqueness and the fine masonry of the latter. The Navaho Monument cliff-dwellings are rarely more than two stories high and most of the ceremonial rooms are rectangular. These buildings are, however, among the best preserved in the southwest and their chambers might be called more appropriately abandoned rooms rather than ruins, the broom being in many cases more necessary than the spade to put them in condition for tourists and students. It is fortunate for historical science that these houses are now protected from vandals and it is to be hoped that their walls, some of which are tottering, will be repaired before it is too late.

JOHN R. SWANTON,
Secretary

THE WASHINGTON CHEMICAL SOCIETY

THE 193d meeting of the Washington Chemical Society was held at the George Washington University, on Thursday, November 11, 1909. President Walker presided. The papers presented were: "The Rôle of Water in Minerals," by W. F. Hillebrand, and "The Exact Determination of Sulphur," by J. Johnston.

The election of officers for 1910 resulted as follows:

President—G. H. Failyer.

First Vice-president—W. W. Skinner.

Second Vice-president—J. M. Bell.

Secretary—J. A. LeClerc.

Treasurer—F. P. Dewey.

Councilors—E. T. Allen, P. H. Walker, L. M. Tolman.

Members of the Executive Committee—M. X. Sullivan, H. C. P. Weber, H. E. Patten, S. S. Voorhees.

The attendance was 106.

J. A. LECLERC
Secretary