

"Peculiar Examples of Plant Distribution," by Dr. H. S. Pepoon.

"Manganese in Illinois Water Supplies," by Mr. H. P. Corson.

"Some Features in the Classification of *Sep-toria* and *Parodiella*," by Mr. Philip Garman.

"Comparison of Methods of Determining Dissolved Oxygen in Water and Sewage," by Mr. F. W. Mohlman.

"The Grasses of Illinois," by Miss Edna Mosher.

"A Florida Smut in Illinois," by Miss Margaret Mehlhof.

"The Violets of Illinois," by Mr. Rufus Crane. *Section of Zoology, Entomology and Geology*

"What California is Doing in the Control of Injurious Insects," by Miss Gertrude A. Bacon.

"The Labium of the Nymphs of Zygoptera," by Mr. Philip Garman.

"The Comparative Morphology of Some Carabid Larvæ," by Mr. Clyde C. Hamilton.

"The Loess in Illinois: Its Age and Origin," by Dr. T. E. Savage.

"Recent Crustal Movements in the Great Lakes Region," by Professor Charles E. Decker.

"A Restudy of Worthen's Type Section of the 'Productive Coal Measures' for Central and Western Illinois," by Dr. T. E. Savage.

"The Prothonotary Warbler," by Dr. W. S. Strode.

"Some Adaptations for Respiration in Aquatic Hemiptera," by Miss Anna G. Newell.

"Mouth Parts of the Blow-fly," by Mr. Alvah Peterson.

"Collecting Snail Shells," by Mr. James H. Ferris.

"The Morphology of Certain Sphinx Pupæ," by Miss Edna Mosher.

On Saturday afternoon addresses were delivered by Ex-Governor Northcott, and the retiring president, Dr. A. R. Crook, on "The Relation of Academies of Science to the State."

The officers elected for the coming year are:

*President*—Dr. U. S. Grant, Northwestern University, Evanston.

*Vice-president*—Dr. E. W. Washburn, University of Illinois, Urbana.

*Secretary*—Dr. A. R. Crook, State Museum, Springfield.

*Treasurer*—Dr. H. S. Pepoon, Lake View High School, Chicago.

The 1916 meeting will be held at the University of Illinois.

E. N. TRANSEAU,

*Secretary*

## SOCIETIES AND ACADEMIES

### THE BOTANICAL SOCIETY OF WASHINGTON

THE one hundred and second regular meeting of the Botanical Society of Washington was held in the Assembly Hall of the Cosmos Club at 8 P.M., on Tuesday, February 2, 1915. Fifty-two members and six guests were present. Dr. P. A. Yoder and Messrs. Stephen Anthony and James M. Shull were elected to membership. The following scientific program was presented:

*Bamboo Possibilities in America*: MR. S. C. STUNTZ.

After a brief introductory statement outlining the past history of bamboo introduction into the United States, and sketching the present condition of bamboo planting in this country, attention was directed to the possible future uses for bamboo. Furniture, basketry, especially for parcel post shipments, Venetian blinds and barrel hoops were suggested as probable industries in which bamboo would find use, while the development for ornamental planting and as a possible stock for paper was especially emphasized. Lantern slides of bamboo plantations and uses abroad and in the United States were shown, together with a considerable exhibit of manufactured bamboo articles.

*Botany of Cacao and Patashte*: MR. O. F. COOK.

The patashte tree is a relative of the cacao, known to botanists under the name *Theobroma bicolor* Humboldt and Bonpland. It has dimorphic branches like cacao, the lateral branches being formed in whorls at the ends of the upright shoots, but only 3 laterals in a whorl, instead of 5 or 6, as in cacao. Many other differences in leaves, inflorescences and flowers were shown. The inflorescences of patashte are confined to new growth at the ends of the lateral branches, while cacao is caulocarpous, with all of the flowers produced from the old wood on the trunk and larger limbs of the tree. The various features were explained with lantern-slide illustrations, and the paper was followed by a brief discussion of the question whether trees with such numerous and definite differences should be classified in the same genus.

*Rediscovery of Lignum nephriticum*: MR. W. E. SAFFORD.

*Lignum nephriticum* is a remarkable Mexican wood which was celebrated throughout Europe in the sixteenth, seventeenth and the early part of the eighteenth centuries, not only for its reputed

medicinal properties, but on account of the wonderful fluorescence of its infusion in spring water. Scarcely a fragment of this wood is now to be found in drug collections, and its very name has disappeared from encyclopedias. It is celebrated as the substance with which the Hon. Robert Boyle made his first investigations in the phenomenon of fluorescence. After giving a history of the literature on the subject Mr. Safford called attention to the confusion surrounding the origin of the wood, and the causes which prevented its botanical identification. For the first time specimens of the wood accompanied by herbarium material of the plant from which it was obtained have been the subject of critical study. The heartwood produced the characteristic fluorescence described by Robert Boyle, and the botanical material corresponded with the original description of Hernandez of the plant yielding *lignum nephriticum*. This proves to be *Eysenhardtia polystachya* (Ortega) Sargent (*Viborquia polystachya* Ortega, *Eysenhardtia amorphoides* H. B. K.). The lecture was illustrated by lantern slides, specimens of the wood and botanical material, photographic enlargements of sections of the wood made by Dr. Albert Mann, plant morphologist; and also by exhibition of the fluorescence of the extract of the wood in the rays of an arc light by Dr. Lyman J. Briggs, Biophysicist, Bureau of Plant Industry, with remarks as to the value of *lignum nephriticum* as an indicator in titrimetric determinations.

THE one hundred and third regular meeting of the Botanical Society of Washington was held in the Crystal Dining Room of the New Ebbitt Hotel, at 6:45 P.M., Tuesday, March 2, 1915. Eighty-two members and seventy-eight guests were present, this being the regular annual open meeting for the president's address.

A dinner preceded the scientific program.

The retiring president, Dr. C. L. Shear, gave an address on "Mycology in Relation to Phytopathology." This appears in full elsewhere in SCIENCE.

Dr. A. S. Hitchcock presented to the society the plans for a proposed publication of a local flora on the flowering plants and higher cryptogams of Washington and the vicinity. It is proposed that this be published about one year from the present time.

The society also passed resolutions of regret upon the death of Dr. Charles E. Bessey.

PERLEY SPAULDING,  
Corresponding Secretary

#### BIOLOGICAL SOCIETY OF WASHINGTON

THE 535th meeting of the society was held in the Assembly Hall of the Cosmos Club, Saturday, February 6, 1915, called to order by Vice-president Hopkins at 8 P.M., with 35 persons present.

Under heading Book Notices, Dr. Ransom called attention to a new biological journal under editorship of Professor Ward, of the University of Illinois, to be devoted to animal parasites.

Under heading Brief Notes, Treasurer Cooke read a letter from Dr. B. W. Evermann, now of San Francisco, a former president of the society, expressing his regret at not being able to attend meetings, his deep interest in the society, and wishes for its continued prosperity.

The first paper of the regular program was by Dr. T. Wayland Vaughan, "Remarks on the Rate of Growth of Stony Corals." Dr. Vaughan reviewed the work done by previous investigators and gave result of his own carefully conducted experiments at Tortugas. The paper was fully illustrated by lantern slides showing apparatus and methods employed in planting corals and results of one and of several years' growth of various corals.

The second paper of the regular program was by Dr. J. N. Rose, "Botanical Explorations in South America." Dr. Rose spoke concerning a botanical exploration on the west coast of South America which he made during the summer and fall of 1914. He stated that when he took up the study of the Cactaceæ for the Carnegie Institution of Washington, it was with the understanding that it should embrace not only herbarium and greenhouse studies, but extensive field work in all the great cactus deserts of the two Americas. His going to the west coast was therefore simply part of a large scheme for botanical exploration. He further stated that plans had been made for similar field work in the deserts of the east side of South America during the coming summer. He gave detailed accounts of his work in the deserts of Peru, Bolivia and Chile, and the peculiar Cacti which he found, described particularly the climatic conditions in those countries, and told of the remarkable crescent-shaped sand dunes of southern Peru. On this trip Dr. Rose collected more than a thousand numbers, obtaining not only herbarium and formalin, but also living material. His collection of living plants which was very large has been sent to the New York Botanical Garden. Dr. Rose's communication was illustrated by maps of the regions traversed, by apparatus used in collecting speci-

mens, and by preserved specimens. The paper was discussed by Messrs. Hitchcock, Vaughan, Goldman and Townsend.

THE 536th meeting of the society was held in the Assembly Hall of the Cosmos Club, Saturday, February 20, 1915, called to order by President Bartsch at 8 P.M., with sixty-five persons present.

Dr. Charles Monroe Mansfield, of the Bureau of Animal Industry, on recommendation of the council, was elected to active membership.

Under the heading of Brief Notes, General Wilcox made observations and inquiries concerning the color of the eyes of certain turtles. His remarks were discussed by W. P. Hay. Dr. Howard described the successful campaign carried on against mosquitoes in New Jersey.

Under the heading Exhibition of Specimens, Wm. Palmer exhibited the tip of the tongue of a sulphurbottom whale and considered the probable use of its peculiar shape. Messrs. Bartsch, Hay and Lyon took part in the discussion.

The regular program consisted of an illustrated lecture by H. C. Oberholser, entitled, "A Naturalist in Nevada." Mr. Oberholser gave an account of a biological survey of parts of Nevada made by himself and others some years ago. He described the geologic, geographic and climatic characters of the route traversed by his party. He mentioned in particular the plants, the mammals, birds and reptiles observed and collected by the expedition; and pointed out how they were influenced in kind and numbers by the unusual geographic and climatic conditions found in Nevada. He showed many excellent views of the country and of the animals and plants encountered.

Mr. Oberholser's paper was discussed by Messrs. Hay, Bartsch, Bailey, Lyon, Goldman, Wetmore and Wm. Palmer.

M. W. LYON, JR.,  
*Recording Secretary*

#### THE ANTHROPOLOGICAL SOCIETY OF WASHINGTON

At a special meeting of the society, held November 3, 1914, at the public library, Dr. J. Walter Fewkes read a paper on "Vanished Races of the Caribbean." The aborigines who, in pre-Columbian times, inhabited the West Indies, represent a vanished race, for with the exception of very incomplete historical accounts and a few highly modified living survivors, archeological remains only are left from which to determine their culture. The Antillean culture belonged to the stone age, and while it had attained a considerable development, it was quite unlike that of any other

area in the New World. These islands were peopled from the neighboring continent, but the peculiar types of stone objects which occur on the islands indicate that the culture they represent originated where it was found. This culture was of two types, one in the Greater Antilles and the other in the so-called Carib Islands. These differ mainly in the forms of stone implements, pottery and other artifacts. For instance, 90 per cent. of the stone implements of the Greater Antilles have the form of celts, while the majority of implements from the Lesser Antilles are axes. This difference in the culture was noticed by Columbus and the early chroniclers. The inhabitants of the Lesser Antilles were called Caribs, the others Arawaks. The Caribs were preceded by an agricultural people whom they conquered in pre-Columbian times. All the islands from Cuba to Trinidad once had a highly developed population, which remained until later times only in the Greater Antilles. It is probable that the aborigines of the Lesser Antilles came from South America, but those of the Greater Antilles from Central America.

At a meeting of the society, held November 17, 1914, in the public library, Rev. Dr. John Lee Maddox, chaplain in the United States Army, read a paper on "The Spirit Theory in Early Medicine." The primitive theory is that disease and death are abnormal, the work of malevolent spirits or of witchcraft. Many modern remedies and practises are the direct descendants of old-time methods and drugs intended to cure the patient by driving out an evil spirit through fear or disgust. Bitter medicines originated in revolting doses intended to disgust the demon. Massage originated in the beatings and poundings through which the evil spirit was to be frightened out of the patient. Bleeding, cupping and trephining were originally intended to facilitate its exit. Through long centuries, even with an incorrect theory, it was learned that certain drugs and remedies had a beneficial effect upon certain diseases. Thus the correct practise developed long before the correct theory. As examples of standard remedies derived from Indian doctors, he instanced ipecac and quinine. In the discussion Dr. Fewkes drew illustrations from the Hopi Indians, Mr. Mooney from the Cherokee, and Dr. Moore from the St. Lawrence Island Eskimo. Dr. E. L. Morgan and others also spoke.

DANIEL FOLKMAR,  
*Secretary*