"Dr. James A. Lyon," by J. I. D. Hinds; (c) "Mr. James H. Baird," by S. Cecil Ewing.

Annual address of the president: "The Probable Origin of the American Indian," by W. E. Myer.

The election of officers for the ensuing year resulted as follows:

President, Samuel M. Bain, University of Tennessee, Knoxville, Tenn.

Vice-president, Samuel M. Barton, University of the South, Sewanee, Tenn.

Secretary, Roscoe Nunn, U. S. Weather Bureau, 1235 Stahlman Building, Nashville, Tenn.

Treasurer, Archibald Belcher, Middle Tennessee State Normal School, Murfreesboro, Tenn.

Editor, A. H. Purdue, State Geological Survey, Nashville, Tenn.

The president appointed as members of the executive committee, J. I. D. Hinds, Castle Heights School, Lebanon, Tenn., and F. B. Dresslar, George Peabody College for Teachers, Nashville, Tenn.

ROSCOE NUNN,
Secretary

NASHVILLE, TENN.

SOCIETIES AND ACADEMIES

THE BOTANICAL SOCIETY OF WASHINGTON

THE one hundred and sixth regular meeting of the Botanical Society of Washington was held in the assembly hall of the Cosmos Club at 8 P.M., October 5, 1915. Thirty members and two guests were present. The following scientific program was given:

Some Recent Investigations in Sugar-beet Breeding (with lantern): MR. F. J. PRITCHARD.

The speaker presented a large number of tables and figures based upon ten years' experiments in sugar-beet breeding from which the following conclusions were drawn: Differences in the size, total sugar content and percentage of sugar of individual beet roots show no evidence of inheritance. There is no correlation between percentage or quantity of sugar of roots of ordinary sizes and their yield of seed, nor between their yield of seed and the average percentage of sugar in their progeny. Fluctuations in percentage and yield of sugar of beet families planted in progeny rows in alternation with check rows greatly exceed their real differences. The discontinuance of selection for one generation caused no deterioration, but some apparent gain in percentage of sugar. No improvement was obtained in yield or percentage of sugar from continuous selection. Both the good and the poor families transmitted average qualities. Fluctuations in percentage and yield of sugar are caused chiefly by irregularities of the soil. The nutritive conditions which favor the production of a large root cause a large tonnage of beets, but a low percentage of sugar. Even with a uniform stand certain rows and certain parts of the field produce a relatively small root and consequently a high percentage of sugar, while neighboring areas produce a large root and a low percentage of sugar. As the fluctuations in percentage and yield of sugar are large, they obscure real differences between varieties or families but real differences may be distinguished by planting each variety or family a large number of times.

Notes on Plant Parasitic Nematodes (with lantern): MR. L. P. BYARS.

After a few introductory remarks concerning the general characteristics of the three groups of nematodes—the free living, animal parasitic, and plant parasitic—the speaker indicated some of the more important anatomical and life-history features of species belonging to the last group. Emphasis was laid on the economic importance of and present distribution of *Tylenchus dipsaci,* the bulb and stem-infesting nematode; *Tylenchus tritici,* a nematode living in wheat kernels; *Aphelenchus armerodis,* the violet bud organism; and *Heterodera radicicola,* the gall-forming nematode, all of which are parasites introduced into this country. Illustrations and drawings were used to show the speaker's method of growing *Heterodera radicicola* in pure culture, and to indicate the effect of this parasite on its host.

The First Washington Botanical Society: MR. P. L. RICKER.

While collecting material for the bibliography and biography in the forthcoming Flora of Washington I first learned[1] of the existence of a Washington Botanical Society organized on March 13, 1817, with thirteen charter members, consisting of John Boyle, W. A. Bradley, Dr. John A. Brereton, Samuel Elliot, Jr., William Elliot, J. W. Hand, Dr. Henry Huntt, Maj. James Kearney, Rev. Dr. James Laurie, Dr. Alexander McWilliams, J. M. Moore, John Underwood and George Watterson. Subsequently six additional mem-

[1] Coville, Frederick V., "Early Botanical Activity in the District of Columbia." Records of the Columbia Historical Society, 5: 176–194. 1901.

bers were elected and three honorary members, consisting of Dr. Jacob Bigelow, Dr. William Darlington and Dr. William P. C. Barton. Meetings of the society were held until March 27, 1826, when the society adjourned sine die. It was ordered that the library of the society be deposited in the Washington Library. The herbarium was placed under the care of Dr. McWilliams, but its subsequent disposition has not been learned. The records of the society eventually found their way into a local second-hand book store and were presented to the late Dr. Lester F. Ward in 1883, remaining in his possession until his death, when his library was given to Brown University. After correspondence with the librarian of Brown University to learn if the records were there, formal request was made to the trustees of Brown University by the secretary of this society for the return of the records to Washington, which request was granted. The proceedings of the meetings for the first few years show considerable progress in the study of the local flora and offer much interesting historical data.

The fifteenth annual meeting of the Botanical Society of Washington was held in Room 33, West Wing, New Department of Agriculture Building at 1:30 P.M., October 19, 1915, with twenty-four members present. The report of the executive committee showed the following facts concerning the activities of the society for the preceding year: Average attendance of seventy-three members and guests. Seven members were lost during the year, one by resignation and six by change of residence. Eighteen new members were elected, making a total net membership of one hundred and forty-three. One joint meeting was held with the Washington Academy of Sciences. Twenty-one formal scientific papers were presented and the following visiting botanists were entertained: Professor J. C. Bose, Drs. Camillo Schneider, F. Kolpin Ravn, Otto Appel and Gentaro Yamada.

The customary reports were presented and approved and the following officers elected for the ensuing year: *President,* Professor A. S. Hitchcock; *Vice-president,* Dr. J. W. T. Duvel; *Recording Secretary,* Chas. E. Chambliss; *Corresponding Secretary,* W. E. Safford; *Treasurer,* Dr. C. E. Leighty; *Vice-president in Washington Academy of Sciences,* Dr. R. H. True.

Perley Spaulding,
Corresponding Secretary

THE ANTHROPOLOGICAL SOCIETY OF WASHINGTON

At the 490th meeting of the society, held November 2, 1915, Dr. Walter Hough spoke on "Progress in Anthropology in California." He showed how means of transportation and food and water supplies influenced the direction of migrations in California. The entire Pacific coast was described as a swarming place of tribes offering perplexing problems to the ethnologist. Among others, Bancroft, Lummis and Cowan, have made contributions in this field. The great museum collections in San Francisco and Los Angeles were described and the important researches of Kroeber and others at the University of California; also a study of the 400 shell mounds of San Francisco bay made by Gifford, Nelson and Waterman. The exhibits at the expositions have been previously described before the society.

At the 491st meeting of the society, held December 7, 1915, Mr. Francis LaFlesche read a paper on the "Right and Left in Osage Rites." The Osage, in the early days of their tribal organization, believed that all life proceeded from the fructifying union of the sky and the earth and founded their gentile organization upon this concept. They divided the people into two parts, the "Tsi-zhu" (household), representing the sky, and the "Ho^{n}-ga" (sacred), representing the earth. They likened the tribe to a living man facing the east, the Tsi-zhu division being on the north, the Ho^{n}-ga on the south. When organizing a war party, however, the position of the village was changed so that the symbolic man faced to the west. All ceremonial movements were made with reference to the right and left sides. The same idea determined the placing of symbolic articles used in the ceremony and appeared in the daily customs of the people.

In discussing the paper, Miss Alice C. Fletcher and Messrs. Hodge, Swanton, Fewkes, Mooney and Michelson referred to similar concepts and organizations in other tribes, as among the Hopi of the south and the Piegan of the north. Several thought that the origin of 6 as a ceremonial and sacred number had reference to the six "cardinal points," north, south, east, west, up, and down. Explanations were also suggested for the preference given the left hand in these ceremonies. The sky concept possibly had a religious significance.

Daniel Folkmar,
Secretary