illustrate in a very satisfactory manner the mode of ion transference.

FREDERICK H. GETMAN. COLLEGE OF THE CITY OF NEW YORK.

## THE GEORGE WASHINGTON UNIVERSITY AND THE GEORGE WASHINGTON MEMORIAL ASSOCIATION.\*

The annual meeting of the George Washington Memorial Association was held at Rauscher's on Wednesday, December 14. president, Mrs. Archibald Hopkins, opened the meeting with an address recalling the events of the year, dwelling especially on the agreements of the association with the Columbian University, whereby the university changed its name from Columbian to the George Washington University and the association pledged itself to raise the sum of \$500,000 to construct the central building of the proposed new university group in Van Ness Park. This building, the administration building of the university, was to receive the name of 'The George Washington Memorial Building. The president laid stress upon the need in Washington of such a building, which should contain an auditorium for meetings of international tribunals and of scientific organizations.

The executive committees of the university and of the George Washington Memorial Association have already designated the architects who were to compete for the memorial building. The park commissioner, the committee for Greater Washington, Mr. McKim, Mr. St. Gaudens, Mr. Olmstead, and Mr. Burnam, with whom is associated Mr. Bernard R. Green, have consented to act as jury of award, and the date of the competition will be fixed as soon as the program, which was being prepared by Professor Percy Ash, of the university, should be finished and submitted to the jury.

The most vital problem, therefore, which the association had to solve was the raising of funds for the Memorial Building. Fifty thousand dollars were already in the possession of the association, and the association desired to raise fifty thousand more before March,

1905, so that the building could then proceed.

The president felt justified in saying that the outlook was most encouraging. enthusiasm of California and of Utah had been rekindled by the recent visits of Dr. Needham; in Ohio and South Dakota interest was reviving, and Virginia, Maryland, Pennsylvania and New York were organizing meetings to be held in January and February. while, literature was being prepared, plans carefully considered and state organizations perfected. All was as yet tentative; yet, in view of the work of the past year, the evident reawakening of interest, and the hearty cooperation of the George Washington University, the future of the George Washington Memorial Association seemed to be full of promise. The president then called upon Dr. Needham.

In his address Dr. Needham laid especial emphasis on the national and scientific character of the governing board of the George Washington University, and gave a brief sketch of the organization of the university, which had in view primarily graduate and professional studies, but grouped about this higher university work, as feeder to it, the organization provides for a number of independent colleges for undergraduate students, governed by their own distinctive boards. The first of those, Columbian College, which embraced all the undergraduate work now being done in the university, has now 401 students, this organization combining the essential features of the English idea, of Oxford and of Cambridge, with the American idea of a university.

Dr. Walcott congratulated the association upon the firm relations established during the past year with the George Washington University. Some fear, he continued, had been entertained that the Carnegie Institution, established for scientific research and for graduate work, would materially interfere with the prosperity of the university. This apprehension, however, had been removed, for, by the election of Dr. Woodward as its president, the Carnegie Institution definitely limited its sphere purely to scientific research. The committee on nominations having presented the names of the officers of 1903–04 for re-election,

<sup>\*</sup> From the Bulletin of the University.

these officers were unanimously re-elected by the association for the year 1904–05.

## PORTO RICO EXPERIMENT STATION.\*

The work of the Porto Rico experiment station has been considerably enlarged during the past year, partly with the aid of an appropriation of \$2,700 made by the insular legislature and nearly \$1,200 received from the sale of farm products.

Many permanent improvements have been made on the station farm. A small tile machine was purchased and drain pipes were manufactured on the farm. Practically all the river bottom or alluvial land on the station farm has been drained. This is the first under-drainage ever undertaken in Porto Rico. and it is believed that it will not only greatly enhance the producing power of the station property, but will also serve as a valuable object lesson to the planters of the island. An experimental irrigation system has also been installed on this farm.

A preliminary survey of the principal tobacco districts of the island has been made by a tobacco specialist in the employ of the station, and a report on these investigations is being prepared.

The investigations on different methods of pruning, shading and fertilizing coffee plants have been continued. In an attempt to exterminate the coffee-leaf miner by hand picking the leaves proved the impracticability of this method of repressing this pest. The entomologist of the station has also been investigating the possibility of combating this insect by means of parasites, and reports the discovery of an effective parasite which, it is believed, by careful propagation and distribution, will aid very materially in keeping in check this insect, which is by far the most serious enemy to coffee cultivation now upon the island.

A special study of the diseases of coffee and other plants was made by the botanist of the Connecticut State experiment station, who was temporarily in the employ of the Porto Rico station.

\* From the Report of the Secretary of Agriculture.

Much attention is being given to the propagation of citrous fruits, especially with a view of obtaining better stock for growing in the orchards of Porto Rico. A bulletin on the methods of production and marketing of oranges, with special reference to Porto Rico conditions, has recently been issued. A large number of tropical fruits, including mango, alligator pear, soursop, nispero, guava and many others, have been brought together in a tropical fruit orchard.

The tea, rubber and cacao plantations mentioned in my last report are flourishing and are being extended. Among the tropical vegetables which enter into the variety tests are the yautia, taro, edible canna, arrowroot, cassava, yams and sweet potatoes, all of which have thus far done well.

Experiments are being carried on with a number of fiber plants. Among these maguey and sisal have thus far given very promising results. The station has thus far conducted no careful experiments with cotton, but the industry has been extended throughout the island to a considerable extent during the past year, and the station officers report that the results seem to indicate that it is possible to profitably produce a medium grade of Sea Island cotton in Porto Rico.

The report of the Bureau of Soils on the soil survey from Arecibo to Ponce, made by that bureau in cooperation with the Porto Rico station, has been reprinted in both English and Spanish for distribution on the island. Several other bulletins and circulars in both languages have been issued during the year.

## EIGHTEENTH SESSION OF THE MARINE BIOLOGICAL LABORATORY, 1905.

The eighteenth season of the Marine Biological Laboratory opens under favorable auspices. For the first time the laboratory is in a position to welcome investigators at any season of the year; a large stone building has been purchased and equipped with heating apparatus, running fresh and salt water, and the usual laboratory supplies. Two private rooms for investigators have been furnished in this building and are ready for occupancy. Mr. Gray, curator of the supply department,