

little of it has been written in the English language. * * * But two authors have attempted a connected sketch of the Porto Rican flora, and the efforts of these not only remain incomplete in that they do not cover the entire series of families of flowering plants, but the lists are also partial and local, as the writers themselves realized. The first of these sketches was that of Don Domingo Bello y Espinosa ('Apuntes para la flora de Puerto-Rico,' 1881-1883). * * * The second of these sketches and the most important contribution to the botany of Porto Rico is the Flora projected by Dr. A. Stahl, of Bayamon, but unfortunately only partially published ('Estudios para la flora de Puerto-Rico,' 1884-1888). * * * In spite of public indifference and official animosity six parts of the flora were issued at the expense of the author, having been prepared in the intervals of his professional life as a physician. Publication ceased in 1888, and Dr. Stahl no longer hopes to continue the work." Two other titles are given, viz., 'Diccionario botanico de los nombres vulgares cubanos y Puerto-Riquenos,' by Manuel Gomez de la Maza, and 'El medico botanico criollo,' by Rene de Grosourdy.

The catalogue proper consists of an alphabetical list of names, common and scientific, with descriptive notes and cross references. Here the reader finds many interesting facts about tropical and semitropical plants which are or might be grown in Porto Rico and other West Indian islands. One is struck, after reading a few pages, with the fact that there is much to be done on this island possession of ours in order to develop its use of the plants which may be grown there with profit. Coffee appears to be the most important of the cultivated plants, and yet we learn that "the most careless and wasteful methods are practised in the culture of this important crop. No attention is paid to the selection of seedlings, most of the new plants being secured from seeds that have germinated under the trees in the old plantations. It is estimated that by proper methods of cultivation the yield from the land now devoted to coffee could be doubled or tripled." Similar statements are made with reference to most of the

crops of the island. Evidently there is a field of work here for the United States Department of Agriculture, and this volume is an indication that it is entering upon it with energy and ability.

CHARLES E. BESSEY.

THE UNIVERSITY OF NEBRASKA.

THE CARNEGIE INSTITUTION.

THE newspaper reports in regard to the second annual meeting of the trustees of the Carnegie Institution, held in Washington on December 9, read as follows:

"There were two sessions, with a dinner following. The report submitted on the proceedings of the last year was supplemented by explanatory statements by Dr. Gilman, the president of the institution, and by Dr. Walcott, the secretary. The report on the year's operations showed sixty-six grants made by the executive committee for scientific research, involving an aggregate of \$150,000, and recipients representing every part of the United States and the smaller colleges as well as the large universities, observatories and laboratories. Twenty-five research assistants were appointed. These sums are exclusive of administrative and incidental expenses of the institution. The beneficiaries are given the option of making public the nature of these grants. Action on request for 1,022 grants, involving an allowance of \$3,000,000 a year, was indefinitely postponed. Arrangements have been made for publication at an early day of eleven scientific papers, most of them making large and costly volumes. Among the subjects now under consideration by the institution in connection with grants are a solar observatory; southern observatory; geophysical laboratory; Transcaspian exploration and archeological exploration; exploration in the south Pacific, establishment of biological experiment laboratories and international magnetic researches.

"The morning session was devoted mostly to a discussion of several large projects. No conclusion was announced. The trustees authorized an aggregate expenditure of \$373,000 in grants for scientific researches and \$40,000 for publications during the ensuing year.

"It is said that Mr. Carnegie made a brief address, in which he commended the work already done and talked of the aim of the institution to give liberal encouragement, in cooperation with other institutions, to investigation, research and discovery; to provide buildings, laboratories,

books and apparatus and afford advanced instruction to qualified students.

"The following officers of the Board of Trustees were elected:

Chairman—John S. Billings, New York; Vice-Chairman—Elihu Root, secretary of war; Secretary—Charles D. Walcott, director of the geological survey.

Vacancies on the board were filled by the election of John Cadwalader of New York to succeed Abram S. Hewitt, deceased; Cleveland E. Dodge, New York, to succeed William E. Dodge, deceased, and Judge William Wirt Howe, New Orleans, to succeed Justice Edward D. White, resigned.

Secretary of State John Hay was chosen as a member of the executive committee in the class of 1905 to succeed Mr. Hewitt and Dr. S. Weir Mitchell and Carroll D. Wright were reelected for three years as members of the executive committee.

"President D. C. Gilman will resign his office one year hence. For some time rumors have been current that Dr. Gilman would retire during the present meeting, and when it was known that he and Mr. Carnegie had had a long private conference it was assumed that the matter was settled. A letter from Dr. Gilman to the trustees, however, showed that he did not intend to make any sudden move. His letter reminded his colleagues that the fixed term of the presidency of the institution was five years, of which he had now served two; that his increasing age made the labors of an executive at the head of so great an establishment very onerous, and that he did not feel that he could continue to bear the burdens beyond the next year, when he should expect the acceptance of his resignation."

HENRY CARRINGTON BOLTON.

At a meeting called by the Washington Chemical Society, held in Columbian University, on Monday evening, November 25, in honor of the memory of the late Henry Carrington Bolton, addresses were made by the president of the society, Dr. F. K. Cameron, Dr. Chas. E. Munroe, Dr. H. W. Wiley, Dr. F. W. Clarke, Dr. Marcus Benjamin and Professor R. B. Warder. A committee consisting of Drs. Munroe, Clarke and Wiley was appointed with power to formally express the sorrow of the members of the society for the bereavement which they had suffered. Fol-

lowing is the memorial prepared by the committee:

"Death has suddenly removed from earth our friend and coworker, Dr. Henry Carrington Bolton. In his death chemistry has lost a disciple, who gave to her service the enthusiasm of his youth, the strength of his manhood and the wise council of his ripper years.

"Our section has lost a member who through his experimental researches and especially by his notable additions to bibliography has contributed much to the advancement of the science which it is the purpose of this society to promote. These distinguished services to science have placed all who are interested in chemistry under lasting obligations.

"The student of chemistry has lost a friend who was always ready to extend the right hand of fellowship and to contribute freely from his rare store of knowledge and extended experience.

"The community has lost a man who by his genial qualities, his high ideals, his faithfulness to the duties he undertook, his catholicity of views and of interests and his tolerance of the opinions of others endeared him to all who knew him.

"His life was a benefaction, his presence always a blessing and his career one of usefulness to man.

"We ask that this tribute to his memory be spread upon the minutes of the society; that it be printed in the proceedings and in *SCIENCE* and that an engrossed copy be presented to Mrs. Bolton.

"On behalf of the society,

"CHAS. E. MUNROE,

"F. W. CLARKE,

"H. W. WILEY."

SCIENTIFIC NOTES AND NEWS.

THE Royal Society held its anniversary meeting on November 30, when the officers were elected whose names have already been printed in this journal. A contest took place for the post of general secretary, vacant by the resignation of Sir Michael Foster, for which Sir Archibald Geikie was nominated by