

## Annual Report 1881-1882

To the President of the University:

SIR,

I have the honor to submit the following Report upon the condition and progress of the Arnold Arboretum during the year ending August 31, 1882.

The City Council of Boston in December, 1881, by a nearly unanimous vote authorized their Park Commissioners to expend the sum of sixty thousand dollars in buying certain pieces of land adjacent to the Arboretum, on the condition that satisfactory arrangements could be made with the President and Fellows of Harvard College for the use, under certain restrictions, of the Arboretum as a public park. Some progress has since been made towards this arrangement, which, without interfering with the scientific aims of the Arboretum, will increase its local influence by freely opening its collections to the public, and by securing for additional and greatly needed land, suitable and dignified approaches, and carriage drives. Sufficient progress, however, in these negations has not been made to authorize the final adoption of any plan of planting the collections; and it has been found necessary to postpone again the arrangement of the Arboretum. This delay is greatly to be regretted. it necessitates the constant moving of the plants in the nursery, thus increasing the cost of maintenance, and threatening to injure if not destroy many rare trees procured or raised for the Arboretum with no small labor for, as I pointed out in my last Report, it is impossible to arrange the plantations in the grounds now occupied on any plan which could be adjusted to the larger scheme under contemplation.

The nurseries have been enlarged by the addition of an acre and three quarters, and have been almost entirely remodeled and replanted. They are in a satisfactory condition and contain a great number of valuable and interesting plants.

Various experiments in book-keeping have been tried from time to time with the view of preserving an accurate record of every plant in the collection; they have not hitherto been satisfactory, and have been abandoned as either too complicated or too expensive for practical working. The future value of the Arboretum would, however, be greatly increased, if the history of each tree could be preserved as a record of the hardiness and rate of growth of the species, or of different individuals of the same species raised under different conditions or descended from ancestors long subjected to different climatic conditions. An attempt, which promises to be successful, to preserve such records by means of a Card Catalogue similar to those now in

general use in Public Libraries, has been made during the year, and a complete Catalogue of the collection has been prepared. A numbered card represents each species in the collection; and a card with the same number with an additional sub-number represents each distinct lot of plants of the species, raised at different times or obtained in a different manner from the lot represented by the first card.

The card contains the name of the species, the source from which the plant is derived, and, if raised in the Arboretum, the date at which the seed was sown, space being left for correcting the name when necessary, and for future records such as the date of final planting, or any notes upon the rate of growth, hardiness, &c., of the species which may seem desirable. This plan offers many advantages, and it is hoped that it will bear the test of continuous use. The collection is now represented by some 2,250 cards.

The interchange of plants and seeds with other botanical and horticultural establishments has been continued during the year. There have been 6,101 plants and 181 packets of seeds distributed, as follows: to all parts of the United States 4,792 plants (including a large number of cuttings supplied to different Public Gardens, and nursery establishments in various parts of the country), and 92 packets of seeds; to Great Britain, 910 plants, and 45 packets of seeds; to the Continent of Europe, 85 plants, and 40 packets of seeds; to St. Helena, 150 plants; to the Cape of Good Hope, 1 packet of seeds; to China, 150 plants; to Canada, 14 plants; to Australia, 2 packets of seeds; to India, 1 packet of seeds.

There have been received during the year 1,477 plants, and 247 packets of seeds from 41 donors.

## HERBARIUM AND MUSEUM

The Herbarium and Museum have lost during the year the advantage of the devoted care of Mr. John Robinson, who has been called to other scientific duties. Mr. Robinson has had charge of these departments of the Arboretum from their beginning, and their excellent condition and efficient working-order are due to his labors. Mr. Charles E. Faxon has assumed the duties performed by Mr. Robinson.

Routine work has been continued during the year upon the Herbarium, which has received several important additions. The accessions of dried plants, woods, fruits, &c., numbering upwards of 700, have been received from 34 donors. Specimens of rare North American trees, principally Oaks and *Coniferae*, to the number of 790, have been distributed during the year to 23 individuals and Institutions in the United States and Europe.

During the year an English translation of the *Comte de Cars Treatise upon the Pruning of Forest Trees* has been prepared at the Arboretum, and published by the Trustees of the Massachusetts Society for Promoting Agriculture. During the last three years the Director has been actively engaged in studying the forests of the United States, and the economic value of North American woods, for the purpose of preparing a report upon this subject to be published as a Special Report of the 10th Census. Twenty Forestry Bulletins, generally accompanied by maps illustrating the forests of different parts of the country and containing some of the results

of this investigation, have been published by the Department of the Interior during the year. The final report is nearly completed, and will probably appear during the next academic year.

Mr. Faxon has begun a set of detailed botanical drawings of the trees of the United States, to illustrate a new North American Sylva, which the Director has undertaken to prepare under the auspices of the United States Government. A set of colored drawings of the flowers and fruits of North American trees has also been commenced during the year to illustrate the very important <a href="Jesup collection">Jesup collection</a> of American forest products, which has been gathered under the general supervision of the Director of the Arboretum for the American Museum of Natural History at New York.

The Museum and Herbarium still find temporary accommodation in the Dwight House, Warren St., Brookline.

C. S. SARGENT, Director.