

## Annual Report 1901-1902

## TO THE PRESIDENT OF THE UNIVERSITY:

SIR,

I have the honor to submit the following report of the progress and condition of the Arnold Arboretum during the year ending July 31st, 1902.

The ground occupied by the Tulip-trees, Lindens, Horse-chestnuts, Ashes, Catalpas, and Elms has been plowed, graded and laid down permanently in grass. The work of grading the surface, which has been carried on gradually for several years, is now finished in the original Arboretum. An additional mile of grass walk has been made during the year, and all the principal collections can now be conveniently reached by these paths, which are useful for students and attractive to the general public. The heavy and expensive work of construction is now finished, and the care and improvement of the collections, which constantly require attention and often renewal, and the introduction of newly discovered plants will more than exhausted income of the present inadequate Arboretum Endowment.

The exchange of plants and seeds with other botanical and horticultural establishments has been continued during the year. 10,952 plants (including cuttings and grafts) and 1,753 packets of seeds have been distributed as follows: To the United States, 10,648 plants and 446 packets of seeds; to Canada, 32 packets of seeds; to Great Britain, 304 plants and 179 packets of seeds; to the continent of Europe, 995 packets of seeds; to Japan, 97 packets of seeds; to Java, 4 packets of seeds. There have been received during the year 3,611 plants (including cuttings and grafts) and 548 packets of seeds.

During the year 6,893 sheets of dried plants have been added to the herbarium and 207 sheets have been distributed to other establishments.

The library has received by gift 690 bound volumes and 293 pamphlets.

During the summer four of the superintendents of the Metropolitan Park System passed several weeks at the Arboretum studying and practicing the art of pruning and the general care of trees. Students of landscape-gardening from the [Massachusetts] Institute of Technology have received instruction at the Arboretum during the spring and autumn months from Mr. Jack; and the Arboretum appears to be much frequented by students at the Bussey Institution.

Several years ago Mr. Morris K. Jesup, the President of the American Museum of Natural History, presented to the Arboretum wood specimens of nearly every North American tree. These specimens, which are half sections of trunks and fourteen inches long, show the bark and on a horizontal plane the polished and the natural wood. These specimens were cut from the

larger specimens which form the Jesup Collection of North American Woods, the gift of Mr. Jesup to the American Museum of Natural History and brought together and arranged by me during the last twenty-two years. Want of sufficient means to display properly Mr. Jesup's gift made it necessary to store temporarily this collection, but during the past year Mr. Jesup has furnished, at a cost of \$2,800, one of the exhibition halls in the Museum Building with glass cases, and this hall is now devoted to the display of this important collection. Each specimen is accompanied by a label 123- inches long and 7 inches high. One half of this label consists of a map of North America; on this the area over which the particular tree grows spontaneously is colored green; on the other half of the label is printed a popular description of the tree, with the strength, weight and uses of its wood. These labels are duplicates of the labels made originally for the Jesup Collection and give in a condensed form much useful information.

At his own expense, Mr. George R. Shaw has improved the Museum building by fire-proofing the attic ceiling and laying hardwood floor in the attic.

During the year two supplementary volumes of The Silva of North America, made necessary by the discoveries of the last twelve years, have been finished and will be published in December. These volumes complete the book. Planned some years earlier, work on this Silva was really begun in 1879, when I undertook to prepare for the General Government An account of the trees and forests of the United States for one of the final reports of the 10th Census. The first volume appeared in October 1890, and the twelfth in January 1899, while nearly three years have been needed to complete the two final volumes, which are chiefly devoted to the description of trees whose existence was not even suspected when the plan of the work was first made. The preparation of this book has made necessary the accumulation of a library of more than 9,000 volumes and a large Herbarium, both now the property of the University, and innumerable journeys extending to all parts of this country, to Japan, and to the important museums and libraries of Europe. During the year the first part of An illustrated work on Trees and Shrubs, intended chiefly to make known the new or rare plants of the Arboretum and other undescribed woody plants from different parts of the world, has been finished with the cooperation of my associates and of the botanists of the Gray Herbarium and will appear in December. It is proposed to issue this work in parts of twenty-five plates at irregular intervals and as often as interesting material is found for it.

Work on the <u>Bradley Bibliography</u> of dendrological literature has progressed steadily during the year, and 46,000 cards are now ready for the printer. My thanks are again due to the Trustees of the Massachusetts Society for the Promotion of Agriculture for their annual grant of \$2,500 to be used in increasing the knowledge of trees, and to the members of the Visiting Committee for their support and assistance.