

# Annual Report 1883-1884

TO THE PRESIDENT OF THE UNIVERSITY:

SIR,

I have the honor to submit the following report on the condition and progress of the Arnold Arboretum during the year ending August 31, 1884:

Construction upon the roadways under direction of the <u>Park Department of the City of</u> <u>Boston</u> has been steadily continued during the year (see Appendix C. joined to the Report of the Director of the Arnold Arboretum for 1882-83). The portion of the main driveway which is to connect the entrances to the Arboretum from Centre and South Streets is nearly completed, and will be opened to the public early next year. The progress made, however, in the construction of the road-bed and the grading of slopes has not justified the beginning, even, of any of the Arboretum plantations in connection with this drive.

# PLANTATIONS AND NURSERIES

Permanent boundary plantations, varying in width from 25 to 90 feet, and with a total length of 2,397 feet, have been made during the year. The ground occupied by these plantations, which are intended to protect the borders of the Arboretum, and cut off the view from the inside of buildings and other inharmonious objects, has been prepared in the most thorough and careful manner. Nearly 3,000 trees supplied from the nurseries were used in these plantations. In spite of this draft, however, the rapid accumulation of plants has made it necessary to still further increase the area of nursery ground during the year. Nursery plants have generally been transplanted again; and all the collections are in a satisfactory condition. The card catalogue of this collection now contains 3,425 entries, an increase during the year of 883 entries.

The collection of shrubs is especially large and rich, containing many rare species here cultivated for the first time. It is proposed for the sake of convenience of management and comparison to arrange this collection during the coming year in systematic order, and in such a way as to allow its increase and the development of individuals until the completion of the roads by the city on the east side of the grounds make it possible to permanently group the different shrubs upon amore picturesque and natural plan than can now be adopted. Two acres of ground have been drained, enriched, and prepared to receive this collection, which will be planted next spring in wide parallel beds.

In connection with the construction of roads 328 1/3 squares of excellent loam have been stacked at convenient points for future use in planting at a cost to the Arboretum of \$498.08.

#### WOODS

A large part of the Arboretum woods is composed of old and nearly fully grown trees. They occupy the most rocky and less fertile portions of the ground, and begin everywhere to show the effects of early crowding and insufficient nourishment. Many of these trees are gradually dying at the top--a sure sign that they are in a precarious condition.

It is desirable to keep permanently covered with natural woods all the rocky and sterile parts of the Arboretum unfit for collections, and a large portion of these old trees must be retained until a new growth is ready to replace them. A system of pruning the old trees in these permanent woods has been commenced during the year. This is slow and expensive work, which will occupy, for the whole Arboretum, several years and which can only be performed by skilled labor under careful direction. It is expected, however, that trees thus pruned will regain considerable vigor and insure by the seeds they will shed and the protection they will afford the ground and young trees already growing among them the permanence of these woods.

## INTERCHANGE OF PLANTS AND SEEDS

The interchange of plants and seeds with other botanical and horticultural establishments has been continued during the year. There have been 4,518 plants (including cuttings and grafts) and 57 packets of seeds distributed as follows: To all parts of the United States4,151 plants and 57 packets of seeds; to Great Britain, 2 plants; to Germany, 315 plants; to Chili, 50 plants.

There have been received during the year 6,525 plants (including cuttings and grafts) and 139 packets of seeds from 37 donors.

### HERBARIUM AND MUSEUM

Routine work in the Herbarium and Museum has been continued during the year under the immediate direction of <u>Mr. Faxon</u>, who has also made satisfactory progress upon the series of botanical drawings intended to illustrate the new *Sylva* of North America.

There have been added to the Herbarium 798 sheets of dried plants; the Museum has been enriched with important collections of woods, cones, and other fruits, photographs of trees, &c.

The Director, as President of a Commission appointed by the Comptroller of the State of New York to examine its forests and recommend a scheme of legislation for their preservation and management, has inaugurated during the past summer a preliminary survey of the forests of the Adirondack region with reference to their industrial and commercial relations to the rest of the State and their influence upon the flow of streams and water supply.

C. S. SARGENT, Director.