

## Annual Report 1885-1886

TO THE PRESIDENT OF THE UNIVERSITY:

SIR,

I have the honor to submit the following report of the condition and progress of the Arnold Arboretum during the year ending August 31, 1886:

A beginning has at last been made in planting the type collection of trees on the system of arrangement briefly described in my last annual report. The ashes, elms, catalpas, birches, hickories, hophornbeams, and beeches or a large part of the individuals and groups intended to illustrate these genera, have been planted. In the *coniferae* the true pines, the firs, spruces and larches have been planted. The ground has been prepared to receive in the spring of 1887 the oaks, walnuts, and chestnuts. When these are planted, the most important genera of timber trees, those in which individuals require the longest period to attain maturity, will have been arranged. Planting in addition to that already provided for cannot, however, be undertaken until the City of Boston finishes, or at least extends, the roads though the Arboretum. Practically nothing has been accomplished by the city authorities during the year, and no work whatever has been done by them in the Arboretum since December. The planting is now already far in advance of the road-making.

About seventy thousand trees and shrubs have been permanently planted during the year in the systematic arrangement of trees, in boundary belts, and in different border and coppice plantations. The ground which will be occupied by the trees of the permanent type collection has been prepared in the most thorough and careful manner. The contract executed between the President and Fellows of Harvard College and the city of Boston provides that the Arboretum shall be maintained in this place for a thousand years, and there is good reason to hope, therefore, that many of the trees now planted will be allowed to live out the full term of their existence. Trees have never been planted with better promise of undisturbed old age. It is proper, therefore, that all possible provision for their future requirements should be made. None of the trees in the type groups have been planted in pits less than ten feet square, and all trees intended to grow singly and develop into specimens are planted in pits twenty-five feet square. Rock, gravel, and sandy soil has been removed from all pits to a uniform depth of three feet and replaced by a compost of loam and peat. The soil, as far as practicable, has been deepened and enriched over the whole surface planted. Nearly a thousand squares of loam have been brought into the Arboretum during the year for this purpose. The result of this

expenditure, which is very considerable, will not perhaps be apparent for many years, but sooner or later the Arboretum will get the full benefit of it in older and finer trees than could have been raised on its naturally thin and now exhausted soil.

A dwelling-house, with an acre of ground adjoining the Centre Street entrance, has been taken on a long lease from the trustees of the Adams Nervine Asylum. A small propagating house, better adapted to the reduced requirements of the Arboretum than the larger houses of the Bussey Institution which have been occupied for this purpose during several years, has been built at this point. The rest of the leased land will be used as a frame-yard and nursery; the dwelling-house will be occupied by the superintendent of the Arboretum.

The nurseries, plantations, and natural woods are in a healthy and generally satisfactory condition. Young trees have grown well and the old trees in the woods and scattered about the grounds, which have been pruned from to time, now show the good results which follow this method of treatment.

## 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 2606 plants and 106 packets of seeds distributed as follows: To all parts of the United States, 2164 plants and 7 packets of seeds; to Canada, 67 packets of seeds; to Great Britain, 376 plants and 15 packets of seeds; to the continent of Europe, 17 packets of seeds; to the Island of St. Helena, 66 plants.

There have been received during the year, 1773 plants and 156 packets of seeds from 22 donors. Mr. Dawson has collected during the year nearly 62,000 shrubs from the woods in different parts of New England. These have been permanently planted in the borders along the completed driveway or have been added to the nurseries.

## HERBARIUM AND MUSEUM

There have been added to the Herbarium during the year 955 sheets of dried plants. Specimens in the Museum have been rearranged and re-labelled and many duplicate and superfluous specimens distributed.

I was able, through the courtesy of the Secretary of the United States Light-House Board, to spend the month of April, in company with Mr. Faxon, on the light-house tender "Laurel" in visiting the shores and islands of southern Florida for the purpose of studying the peculiar vegetation of that region. A large amount of interesting material was gathered during this journey, which extended also to western Louisiana, Alabama, and the Florida peninsular.

C. S. SARGENT, Director.