

## Annual Report 1917-1918

To THE PRESIDENT OF THE UNIVERSITY:

SIR,

I have the honor to submit the following report on the progress and condition of the Arnold Arboretum during the year ending June 30, 1918.

Charles Edward Faxon, Assistant Director of the Arboretum, died suddenly on February 6th. Mr. Faxon joined the staff of the Arboretum in May, 1882, to take charge of the library and herbarium, which he managed successfully until his death and which he saw grow from insignificance to importance. For these duties he was equipped with a critical knowledge of the New England flora and a facility for acquiring languages which enabled him to read currently those of nearly every country of Europe. It is, however, as a botanical draftsman that Faxon is most distinguished. During his connection with the Arboretum 1920 of his drawings were published. With few exceptions they illustrate works on trees which have been prepared here. His drawings unite botanical accuracy with graceful composition, and the skill of his pencil has placed him among the very few great masters of his art whose names will live as long as plants are studied.

The Arboretum has not before suffered such severe weather conditions as it has during the year. The dry summer of 1917 was followed by the coldest winter which has been known in Boston since weather records have been kept here. The ground froze suddenly in November when it was covered with water from recent rains and did not thaw until April, and during much of the winter it was not protected by snow. There was frost here in June and a severe spring and early summer drought at a time when plants most required moisture.

On the whole, however, the Arboretum has not suffered from the cold and dry weather of the year as much as might have been expected. Only a few plants have been killed outright; several have been killed to the ground but will grow again, and many which appeared hopelessly injured in the spring have come to life.

It is interesting to note that the trees and shrubs recently introduced from western China have not been as seriously injured as some of the native trees of the northeastern states. During the year 254 species in 53 genera, of trees and shrubs have been transferred from the nurseries to the permanent plantations. For many years the propagating department of the

Arboretum and its principal nursery has occupied ground on Centre Street leased for the purpose from the Trustees of the Adams Nervine Asylum. This land has now been given up and a new propagating plant with a greenhouse, cold pit, and frames of modern construction, has been established on the land at the corner of Centre and Orchard Streets purchased several years ago for the purpose.

Mr. E.H. Wilson left Boston in January, 1916, to pass another year in eastern Asia for the purpose of gathering material in Korea for the Arboretum. He found this field such an interesting one that he has prolonged his stay in the East for another year to complete his studies in Korea and to visit Formosa. A number of plants raised here from seeds gathered by him in Korea in the autumn of 1917 are already growing in the Arboretum.

During a visit to Formosa in the late winter and early spring he received unusual assistance from the officers of the Japanese Forest Service, and was able to reach and photograph all the great cone-bearing trees which make the mountain forests of Formosa the most stupendous in the world, excepting only those of western North America.

The botanical exploration of the Missouri-Texas region undertaken in connection with the Missouri Botanical Garden has been continued during the year; and Mr. T. G. Harbison has continued for the Arboretum his botanical investigation of the flora of the southeastern states, principally in North and South Carolina, Georgia and northern Florida. Several trees new to science have rewarded these collectors and show the importance of a more careful study of the flora of the southern United States than has before been given to it.

During the year the second and final volume of the <u>catalogue of the library</u> has been published. In this volume the books and pamphlets are arranged systematically under their subjects, and the library has been rearranged on the plan adopted in this volume of the catalogue. This has made it necessary to use the upper story of the herbarium wing of the Administration Building for books. The library now contains 31,525 bound volumes and 8029 pamphlets, 312 volumes and 311 pamphlets having been added during the year.

During the year 9,276 sheets have been added to the herbarium, which now contains 154,876 sheets of woody plants. During the year 2,658 duplicate sheets have been distributed. The interchange of plants and seeds with other horticultural and botanical establishments has been continued during the year. Including grafts and cuttings, 6,428 plants, and 1,240 packets of seeds have been distributed as follows: To the United States, 6,418 plants and 882 packets of seeds; to Great Britain, 10 plants and 309 packets of seeds; to France, 18 packets of seeds; to Egypt, 2 packets of seeds; to New Zealand, 1 packet of seeds; to Japan, 28 packets of seeds.

There have been received 1,266 plants and 179 packets of seeds as follows: From the United States, 1,256 plants and 98 packets of seeds; from Great Britain, 10 plants; from Korea, 81 packets of seeds. The usual instruction in dendrology has been given in the Arboretum by Assistant Professor J.G. Jack, who from May to June held weekly field meetings attended by

sixteen students, principally teachers. Three special students have used the facilities of the Arboretum continuously through the year.

In June the fifth and final volume of the <u>Bradley Bibliography</u> was published. This work, which was commenced in 1900, contains the titles of books and of articles in the Proceedings of Scientific Societies and Journals relating to the woody plants of the world, in all languages, published before the beginning of the twentieth century. The five quarto volumes contain 3,895 double column pages and rather more than 100,000 titles.

It was intended that this book should be paid for by the income of the fund given to the Arboretum by Miss A. A. Bradley in memory of her father, William L. Bradley, a man devoted to agriculture and interested in planting trees. The cost, however, of preparing and printing it has far exceeded the income of the fund and the annual contributions made by Miss Bradley to increase it; and this deficit has been provided for out of gifts made by other friends to the Arboretum to increase its income.

Without the interest and generosity of the members of the Committee appointed by the Overseers to visit the Arboretum, and of many other friends of the institution, it would have been impossible to have maintained this Department of the University and to have carried on its scientific activities; and I take this opportunity to express to them my thanks for the opportunities which they have given me to make the Arboretum an important dendrological station.

C. S. SARGENT, Director.