

## Annual Report 1904-1905

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 July 31, 1905.

The exceptionally dry summer and autumn of 1904, preceded and followed by winters of unusual severity, have done serious injury in the Arboretum, and trees that have been growing here for from twenty-five to thirty years and appeared thoroughly established have died. Trees native to the northern United States have suffered more than those from other regions, and the conifers of the collection, usually the first to feel the effects of dryness and low temperature, have this time showed themselves able to bear unfavorable conditions better than the deciduous-leaved trees. The brook that enters the Arboretum from the grounds of the Adams Nervine Asylum flows irregularly. For a few weeks of the year it is a torrent, tearing away its banks and choking its bed with stones and gravel; for the remainder of the year it is a dry and unsightly ditch. The annual cost of repairing the damage done by the floods of this brook has been considerable, and to avoid this expenditure, and to improve the appearance of the north meadow, the brook has now been carried under ground in a concrete culvert from the point where it enters the Arboretum directly across the meadow to the point where it flows out of the Arboretum under the Arborway. The length of this culvert is 1,237 feet and it has cost \$7,321.75. The money for this improvement was provided by the members of the Visiting Committee and their friends. For several years the Arboretum has leased from the Trustees of the Adams Nervine Asylum a house with a small piece of ground on Centre Street for the home of the Superintendent and as a nursery. The continuance of the lease of this property is uncertain, and as there is not in the grounds of the Arboretum a site for a house for the Superintendent, the Visiting Committee has purchased for his use a house and about 42,000 feet of land at the corner of Centre and Orchard Streets, Jamaica Plain. The land is close to the principal entrance to the Arboretum and is well adapted for the purpose for which it is intended. It cost \$21,000. The permanent planting of the large collection of North American Thorns (Crataequs) which has been raised here during the last four or five years was begun in the spring. The eastern and southeastern slopes of Peter's Hill have been used for the purpose, and groups of three hundred species have already been planted.

The interchange of plants and seeds with other horticultural and botanical establishments has been continued during the year. 10,801 plants (including grafts and cuttings) and 929 packets of seeds have been distributed as follows: To the United States, 8,716 plants and 52 packets of seeds; to Canada, 389 plants and 47 packets of seeds; to Great Britain, 558 plants and 152 packets of seeds; to the continent of Europe, 1,138 plants and 567 packets of seeds; to Japan, 99 packets of seeds; to China, 2 packets of seeds; to Java, 6 packets of seeds; to India, 4 packets of seeds. There have been received during the year 6,544 plants and 713 packets of seeds. During the year 4,298 sheets of dried plants have been added to the herbarium, and 500 sheets of duplicates have been distributed. The library has received, by gift, 1,429 bound volumes and 587 pamphlets, including a number of rare and expensive books purchased from a fund of \$5,000, given to the Arboretum by Mr. Francis Skinner, of Boston, for this purpose. During the year the usual instruction has been given by Mr. J.G. Jack at the Arboretum to students of landscape--gardening from the [Massachusetts] Institute of Technology and to University students of forestry, and to a spring class of thirty-four special students, largely composed of teachers. The Arboretum has also been used by other teachers to illustrate field lectures on botany and dendrology. During the year Mr. Alfred Rehder, pursuing his work in Europe for the Bradley Bibliography of dendrological literature, has examined the libraries of the botanical and forestry establishments at Munich, Gottingen, Dresden, Vienna, and Buda-Pesth. Mr. J.G. Jack has started on a journey to the East to obtain material for the Arboretum in Japan, Korea, and northern China, and Mr. George R. Shaw has again visited Mexico and Europe to prosecute his studies of the genus Pinus.

The following books and papers have been published during the year: *A Manual of the Trees of North America exclusive of Mexico*. By C. S. SARGENT. 826 pp., with 642 illustrations from drawings by C. E. FAXON. Houghton, Mifflin & Co. March, 1905.

Trees and Shrubs, or Little Known Ligneous Plants. Part IV, completing Volume I, and containing contributions from ALFRED REHDER, GEORGE R. SHAW, and C. S. SARGENT, and 25 quarto plates from drawings by C. E. FAXON. Houghton, Mifflin & Co. April, 1905.

The Pines of Cuba. By GEORGE R. SHAW. The Gardener's Chronicle, series 3, XXXV, p. 179, with figure[s].

*Pines of Western Cuba*. By GEORGE R. SHAW. *The Gardener's Chronicle*, series 3, XXXIX, 98.

*Pinus leiophylla*. By GEORGE R. SHAW. *The Gardener's Chronicle*, series 3, XXXVI, 175, with figure[s].

*Pinus Nelsoni*. By GEORGE R. SHAW. *The Gardener's Chronicle*, series 3, XXXVII, 306, with figure[s].

I take this opportunity again to express my thanks to the Trustees of the Massachusetts Society for the Promotion of Agriculture for their annual grant of \$2,500 for the maintenance of

the Arboretum, which they have now continued for another three years, and to the members of the Visiting Committee for their advice and assistance.

C. S. SARGENT, Director.