

Annual Report 1923-1924

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 June 30, 1924.

On the whole the Arboretum has had a prosperous year. It has met with few losses, and has not before had as many visitors come to enjoy its beauty or for the serious study of its collections.

During the year 3,059 plants (including grafts and cuttings) and 1,413 packets of seeds have been distributed as follows: To the United States, 2,750 plants and 561 packets of seeds; to Canada, 113 plants and 16 packets of seeds; to Great Britain, 191 plants and 358 packets of seeds; to France, 1 packet of seeds; to Italy, 1 packet of seeds; to South Africa, 5 plants and 197 packets of seeds; to Australia, 113 packets of seeds; to New Zealand, 119 packets of seeds; to China, 47 packets of seeds.

There have been received 6,809 plants (including grafts and cuttings) and 351 packets of seeds as follows: From the United States, 6,525 plants and 73 packets of seeds; from Canada, 103 plants and 3 packets of seeds; from Great Britain, 168 plants and 42 packets of seeds; from France, 12 plants and 16 packets of seeds; from Japan, 1 plant and 11 packets of seeds; from China, 135 packets of seeds; from Switzerland, 9 packets of seeds; from Sweden, 10 packets of seeds; from Poland, 9 packets of seeds; from New Zealand, 43 packets of seeds.

The experience of the <u>last fifty years</u> shows that such an institution must consist of three departments: First, the herbarium; second, the library; third, the collection of living trees and shrubs.

The third department is chiefly for the benefit of the general public and for persons interested in gardening and living in climates similar to that of New England. It was visited probably by nearly a million persons during the year, and the number of visitors is constantly increasing.

It is through the third department that the Arboretum has greatly enriched the gardens of the northern states and of many European countries. The value of this department is

dependent on the first department or collection of dried plants, and this is dependent on the second department, the collection of books.

The herbarium, which for many years has been in charge of Mr. Alfred Rehder, now contains 235,913 sheets of mounted plants in which the *Coniferae* are the best represented of all the families as it includes all the species of all the genera, often in long suites, with the exception of those from the mountains of central New Guinea and from the Fiji Islands.

The general woody flora best represented in this herbarium is that of North America and of the Japanese Empire from Saghalin and Korea to Formosa; the woody flora of the rest of the world is very irregularly represented and incomplete, and does not contain, for example, a single specimen from Madagascar or from western Africa, very few from western Europe or from the islands of the southern Pacific, or from western and southern Asia. Beyond the deserts and regions of excessive cold the vegetation of the wooded surface of the world is changing rapidly. Great areas of forest land are cleared for lumber every year, and in the tropics the increasing demand for rubber and the products of other tropical plants will in a few years eliminate many species of trees which have already disappeared from a large part of the area once occupied by them. The knowledge of such trees must sooner or later be found only in herbaria, by the descriptions contained in books, and by photographs.

Books on such subjects are every year becoming absorbed in permanent libraries, and in a few years it will be practically impossible to form what has never yet been formed--a complete collection of dried plants which will make it possible to study in one place in a satisfactory manner the trees of the world and their original variations and distribution. Such a collection is needed and there is no better place for it than the Arnold Arboretum, for at the Arnold Arboretum there is one of the largest collections of living trees and shrubs which can be grown in such a severe climate and an unsurpassed library devoted to the subject. To make such a collection of dried plants will prove a long, difficult and expensive undertaking and should be begun at once if it is ever to be completed.

During the year 19,308 sheets of plants have been incorporated in the herbarium, the largest number ever added to it in one year. Among them are about 2,900 North American plants, 2,350 Chinese plants, 2,000 Australasian plants, 1,320 plants from the Philippine Islands, 1,180 plants from the Himalaya Mountains, other parts of India and Malaysia, 1,020 plants from Mexico, Central and South America, 780 plants from the Mediterranean region and western Asia, 750 plants from Africa, and 2,000 cultivated plants from European gardens.

Of special collections the most valuable additions are a collection from the herbarium of I. Franc of 428 plants from New Caledonia, a region until now unrepresented here, and a collection of 270 plants from the Kenya Colony of British East Africa made and presented by Mrs. Anita Grosvenor Curtis of Boston. Interesting is the collection received in exchange from the British Museum of 1,318 Australian plants collected in the first half of the last century and representing duplicates of specimens which formed the basis of the earlier publications on the

Australian flora; this collection included about 500 herbaceous plants which were sent to the Gray Herbarium.

There have been distributed only about 340 specimens among fifteen institutions in the United States, Europe, Asia, Africa and Australia.

The library, which makes the herbarium useful, contains 35,424 bound volumes and 7,948 pamphlets. 420 volumes and 242 pamphlets have been added during the year. It now contains 26 works published in the fifteenth century (incunabula) and 400 published in the sixteenth century.

The library, which has been in charge of Miss E.M. Tucker for many years, is supplemented by a collection of photographs of trees, mostly 8" X 10" in size, mounted on 11,073 cards. These photographs are labeled and are easily referred to by a card catalogue, the whole being contained in steel cases.

During the year four numbers of the Arboretum <u>Journal</u> and fourteen numbers of the <u>Bulletin of Popular Information</u> have been published. The spring field meetings have been conducted by Assistant Professor Jack and were attended by sixteen registered men and women. In addition to the number of persons who studied at the Arboretum at irregular periods there were several special students who have worked in the herbarium and library, some of them being registered in the <u>Bussey Institution</u> for advanced degrees.

It has never been possible to manage the Arboretum on the income of its permanent endowment, and a much larger endowment is needed if its future usefulness is to be assured. It has always had many generous friends who have realized its value to the world and have helped me in many ways with gifts of books and contributions to the income.

The books have all been presented, and the building which contains the library, the herbarium and the administrative offices is the gift of friends.

During the past year I have received, with the efficient assistance of the Committee appointed to visit the Arboretum by the Overseers of the University, and of the Trustees of the Massachusetts Society for Promoting Agriculture, gifts of \$42,169, from eight hundred persons, to increase the Arboretum income. It is encouraging, as suggestive of the widespread interest in the Arboretum, that this money has been contributed by persons living in all but four states of the Union.

C. S. SARGENT, Director