IN THIS ISSUE

THE most famous Botanical Garden in the United States is the Arnold Arboretum located at Jamaica Plain near Boston, Massachusetts. The purposes and plan of development and administration of Washington’s Arboretum are in many ways similar to those on which Arnold was founded.

A synopsis of an article by Susan Delano McKelvey which appeared in a recent issue of the Harvard Alumni Bulletin as a brief history of the organization and development of the Arnold Arboretum should therefore prove of interest to all who are looking forward to the development of our local Arboretum in Washington Park.

In 1922 the Arnold Arboretum was fifty years old. In an article entitled, “The First Fifty Years of the Arnold Arboretum”, Professor Charles Sprague Sargent, the Director since its beginning, stated that 2,543 species and varieties had been introduced into cultivation in this country. The records show that from 1915 to 1935 over one hundred thousand plants and ten thousand seed packets have been received and eighty-six thousand plants and thirty-one thousand seed packets had been distributed to individuals and nurserymen and many of them are now common and important garden plants.

The climatic conditions of the Puget Sound Region are such that it will be possible to introduce many plants suitable to this and similar regions for which the more rigorous climate of Massachusetts is not adapted. The late Mr. E. H. Wilson of the Arnold staff, who has made many foreign contributions to our gardens, claimed that with a suitable botanical garden in the region of the Pacific Northwest, west of the Cascade Mountains, introductions that did not survive at Arnold might have been saved.

Hugo Winkenwerder.

PROGRESS OF DEVELOPMENT

PROGRESS in carrying out the provisions of the new Arboretum projects on Sections A, B and C are going forward very satisfactorily. The W. P. A. work has been organized much better than last year.

To date the fence has been completed along the entire east boundary where the Arboretum joins the property of the Broadmoor Golf and Country Club.

Work has been started on the so-called upper road. This road will give access to the higher elevations east of the main boulevard and extends from near the north entrance to Broadmoor to the boulevard near the East Madison Street entrance.

It was hoped that the greenhouse would be ready by the first of the year, but owing to unavoidable delay in receiving some of the materials of construction this was not possible. It is now ready for glazing.

On the new projects 5,330 lineal feet of six-foot trails and 3,357 lineal feet of eight-foot trails have been roughly graded. In addition 3,236 lineal feet of two-inch pipe were laid and 4,505 feet of trenches dug for receiving pipe.

Work on the preparation of the nursery is practically complete and it is in fine shape. About 1,200 square feet of cold and hot frames have been constructed and excellent progress has been made in collecting material for planting. This includes in round numbers 2,100 plants representing 175 species and varieties, 3,650 cuttings representing 125 species and varieties, and 750,000 seeds representing 250 species and varieties.

The plants have been heeled in and will later be transferred to their permanent locations. Most of the seeds have been planted in the nursery or hot frames. Others, of course, it will not be possible to plant until spring. A detailed record is being kept of all seeds, plants, and cuttings, and those set out or planted are marked with aluminum markers.
THE ARNOLD ARBORETUM


The history of the establishment of the Arnold Arboretum has been many times published and only the main facts need be repeated. They are briefly given in the pamphlet which its first Director wrote for the information of visitors:

"... It owes its origin to Mr. James Arnold, a merchant of New Bedford who died in 1868, leaving to the trustees of his estate $100,000 to be devoted to the advancement of agriculture or horticulture. One of these trustees was Mr. George B. Emerson (who) realizing the benefit which the public might derive from the establishment of a scientifically managed collection of trees in the neighborhood of Boston, proposed to turn over Mr. Arnold's legacy to the President and Fellows of Harvard College to be used to develop and maintain an arboretum, provided they would devote to this purpose a part of the farm in West Roxbury which had been given to the University by Mr. Benjamin Bussey. This plan was carried out in March, 1872, and 120 acres were set aside for the new Arboretum, in which the University undertook to grow a specimen of every tree and shrub able to support the climate of Massachusetts ... In December, 1882, a contract was made between the University and the City of Boston under which the City agreed to add certain adjoining lands to the Arboretum, to construct and maintain under the direction of its Park Commission a system of carriage drives and walks ... to police the grounds and to assume all taxes which might be levied on the property during the thousand years for which the contract was made. In return for this assistance the University agreed to open the Arboretum to the public from sunrise to sunset during every day of the year, reserving, however, entire control of all collections and of the grounds with the exception of the drives and walks ..."

It may be well to add that the contract with Harvard allowed the Arboretum to contain, as far as is practicable, all the trees, shrubs, and herbaceous plants which can be raised in the open air at West Roxbury. The limitation of the Arboretum content to woody plants (trees, shrubs, and vines) was, therefore, not obligatory under the contract and was purely arbitrary. This limitation is subject to the criticism, perhaps more applicable to the herbarium than to the living collection, that it is inconvenient for the student who should have at his disposal all representatives of a genus, both woody and herbaceous. Since the vegetable kingdom is not so divided, it is at times difficult to determine to which group certain plants should be assigned.

Professor Charles Sprague Sargent was made Director of the Arnold Arboretum at the time of its establishment in 1872. In accordance with Professor Sargent's foresight and desires which he and everyone strove to attain the original area of one hundred and twenty acres was later doubled and the library and the herbarium were built up so that by 1935 the former contained 42,000 titles and the latter 410,000 specimens. The herbarium has the best collection of woody plants of temperate North America and Eastern Asia in the world. The curator of the herbarium, Professor Alfred Rehder, is a world authority on the identification of the ligneous plants of the north temperate zone.

In 1892 Mr. Horatio Hollis Hunnewell donated the present administration building and to it, in 1905, was added a fireproof wing. There was a somewhat inadequate greenhouse. And, from the "worn-out farm" which Professor Sargent stated had represented the original land, grew a plantation of trees, shrubs, and vines which in wealth of material and in scientific importance may conservatively be ranked high among the half-dozen outstanding gardens, exclusive of tropical ones, of the world.

The contents of this garden were mainly assembled through persevering contact with such indi-
viduals and institutions as could supply suitable material, and by collecting expeditions. Outstanding among the collectors sent into the field was Mr. E. H. Wilson, who spent many years in China and Japan and who, after Professor Sargent’s death, became keeper of the Arboretum under its then supervisor, Professor Ames. Much has been written of his valuable contributions to our gardens.

Up to the time of Professor Sargent’s death the Arnold Arboretum was a “one-man” institution. Although nominally affiliated with the University, its administration was left to the director and he was also instrumental in raising the major part of the funds necessary to its upkeep and growth. In the beginning the financial “going” must have been difficult since the available income was only $3,000. By 1926 there was an endowment of about $1,100,000, and yet the income was still insufficient to cover the yearly expenditures; from the start a considerable sum had to be raised annually to cover the deficit.

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After Professor Sargent’s death it was determined to raise $1,000,000 in order to provide for this expenditure in excess of income and to allow for some further development. Professor Oakes Ames, the supervisor, accepted leadership of the “Charles Sprague Sargent Memorial Fund . . .” and through his efforts and those of the members of several State committees it was made possible for President Lowell to announce at Commencement, 1928, that the money had been subscribed. Massachusetts raised approximately one-half of the amount; New York nearly $400,000; Illinois Delaware, and Pennsylvania contributed very helpful sums. The Arnold Arboretum now stands, therefore, on a reasonably sound financial basis. It is my belief that the subscribers to the fund were more concerned for the welfare and growth of the outside collections than they were for the purely scientific aspects of the Arboretum. And it may fairly be said that only from the growing plant can one gain a true comprehension of its habit and the horticultural worth of its flowers, its fruit, and its foliage.

At this point it may be worth while commenting upon some of the increasing problems involved in the maintenance of the living collections. Any outdoor area thrown open to the public of a great city is subject not only to thoughtless injury but also to a certain amount of vandalism. Grass paths, affording pleasanter walking, are difficult to maintain; heavy branches protecting some newly seeded area are removed (and the effort must have been considerable) when these interfered with some favorite “short cut;” newly cultivated beds are tramped down if passage through them is convenient. The barbed-wire entanglements of the battlefront are neither beautiful nor safe in such surroundings; moreover, they have frequently proven useless. Coasting ends up in some rare shrub or tree, and years of cultivation and protection have been in vain. Low-hanging branches —“woody” to be sure, but still brittle—form alluring swings and are frequented not by one but by many boys at a time. Protection might to advantage be increased.

With the possible exception of the astronomical, the Arboretum is the department of Harvard best known in Great Britain, in Europe, and in Eastern Asia. Certainly its prestige in these lands has contributed appreciably to the standing of Harvard University.

WASHINGTON ELM

This tree is the only authentic living tree started from the famous Washington Elm in Cambridge, Massachusetts, under which General George Washington took command of the Revolutionary Armies. Three trees have been started from this tree. One was sent to Cambridge to be planted near the site of the original tree. The second is planted on the capitol grounds in Washington, D. C., and the third on the capitol grounds in Olympia. There are two trees in the University nursery grown from slips of the tree sent to Washington, D. C.