Effects of the Winter in the Arboretum. The effects of the heavy rainfall of the past summer and of the hot dry autumn which thoroughly ripened the wood of trees and shrubs are now shown in the generally good condition of the Arboretum collections which promise abundant crops of flowers and fruit. A few flower-buds have been killed, and there are occasionally brown leaves on Rhododendrons and other broad-leaved evergreens, but not so many as usual at this season of the year. Exotic conifers, including the new Firs, Spruces and Pines from western China, are generally uninjured but the foliage of the native White Cedar (Chamaecyparis thyoides) is badly disfigured. For some reason not easy to explain this tree has never taken kindly to the Arboretum conditions, and suffers here more or less every winter.

It is a late spring in eastern Massachusetts, but several plants have already flowered in the Arboretum or are now flowering here. The flowers of the White Maple (Acer saccharinum) have nearly passed, but those of many of the Elms are now open and have rarely been more abundant; and the Scarlet Maple (Acer rubrum) enlivens the landscape with its bright red flowers.

Winter-flowering Witch Hazels. The flowers of these interesting plants have never been more beautiful and abundant than this year, although they appeared much later than usual. The flowers of Hamamelis vernalis, the species from southern Missouri, usually open late in December and in January, and those of the Japanese and Chinese species are usually fully open in January and February; but with the
exception of a few precocious flowers on a branch of one of the plants of *H. vernalis* which opened late in December, none of these plants were in flower this year until the middle of March. In the size of the flowers and in the length and brilliancy of the bright yellow petals *Hamamelis mollis*, a native of western China, is the handsomest of all the Witch Hazels. The pale green foliage of this shapely shrub is also attractive. It is very hardy and grows rapidly, and might well find a place in any garden or city plot in public view during the winter months. This Witch Hazel is one of the most valuable and interesting shrubs brought in recent years to the United States.

**Prunus Davidiana.** This is the earliest of the Plum, Cherry, Peach and Apricot groups to flower this year. It is one of the wild Peaches of northern China, and is a small tree with lustrous red-brown bark, slender erect branches which form a narrow head, small flowers, narrow pointed leaves and small fruit of no edible value. The flowers are usually of the color of those of the common Peach-tree, and there is a form with pure white flowers. The two forms have been covered with flowers during the past week in the Peach and Apricot Group on the right-hand side of the Meadow Road before its junction with the Forest Hills and Bussey Hill Roads. As a flowering tree in this climate this Peach has little to recommend it for the flower-buds or the flowers are killed almost every year by late frosts, but just now pomologists in this country are interested in it as a possible stock on which to work the common Peach-tree, as it is hardy north of the region where the Peach thrives.

**Early Rhododendrons.** Several plants of the Siberian and north China *Rhododendron dahuricum* have been in bloom on the upper side of Azalea Path during the past week. This shrub has been in European gardens for more than a century but is still little known in the United States. It has small dark green leaves which in this climate remain on the branches until late in the winter, and small bright rose-colored flowers. These are often destroyed by spring frosts, and this plant has never been so beautiful before in the Arboretum as it is this spring. There is a variety *sempervirens* with more persistent leaves and darker-colored flowers. This variety is not blooming this year. Usually *Rhododendron mucronulatum* is the earliest of the Rhododendrons to bloom in the Arboretum but this year it is a week later than *R. dahuricum*, and is only now opening its paler rose-colored flowers. This is a tall, perfectly hardy, deciduous-leaved shrub which has flowered freely every spring in the Arboretum for the last twenty years and is chiefly valuable for the earliness of the flowers which appear on the leafless branches and are rarely injured by spring frosts. In the Arboretum the leaves turn bright yellow before falling late in the autumn. There is a large group of these plants on the lower side of Azalea Path.

**Early Magnolias.** The flower-buds of the Japanese *Magnolia stellata* have been nearly all killed in the Arboretum. This should not, how-
ever, discredit this beautiful shrub, for the plants here are in low ground and in a particularly trying position, and in other Massachusetts gardens plants of this Magnolia have not been injured and are now in full bloom. The flower-buds of the other early-flowering Japanese species, *Magnolia kobus* and its variety *borealis*, have not been injured and are now just opening. As flowering plants they are the least desirable here of the Magnolias which bloom before the leaves appear, for the flowers are not large and only exceptionally are produced in large numbers.

**Daphne Mezereum.** A plant of the white-flowered form of this small European shrub has been in bloom on Azalea Path for the last two weeks. The purple and the white-flowered forms are useful garden plants because they are almost the first shrubs to open their flowers in this climate and because the flowers are not injured by spring frosts. This Daphne is interesting to us in this country because it is one of the few shrubs native of Europe which have become widely naturalized in some parts of North America, as in eastern Massachusetts and on the Canadian side of the Niagara River above the Falls.

**The Cornelian Cherry,** which is a Dogwood (*Cornus mas*), is one of the earliest trees or tree-like shrubs with conspicuous flowers to bloom in eastern Massachusetts. The flowers are light yellow and are borne in clusters in the axils of the unfolding leaves and, although individually small, are produced in such profusion that the branches are covered with them. The flowers are followed by bright red, lustrous, oval fruits the size of small olives. The flower-buds and the flowers of this tree are not injured by cold. The habit of the plant is good; the foliage is dark green and abundant, and the fruit, although somewhat hidden by the leaves, is handsome. The Cornelian Cherry, which is a native of Europe and western Siberia, has been an inhabitant of gardens for more than three hundred years. In the United States it was probably more often planted in the first half of the last century than it is at present, although there are not many early-flowering trees hardy in this climate which are better worth a place in the garden. The largest specimen we know in eastern Massachusetts is in the Public Garden of Boston, near Boylston Street. In the Arboretum it may be seen with the other Dogwoods at the junction of the Meadow and Bussey Hill Roads.

**Early-flowering native shrubs.** Two yellow-flowered native shrubs are in flower and are well worth the attention of the makers of American gardens by whom they have been generally neglected. These are the Leatherwood, *Dirca palustris*, and the aromatic Spice Bush, *Benzoin aestivale*. Their leafless branches are now covered with small yellow flowers, and those of the Spice Bush will be followed in the autumn by scarlet lustrous fruits. The leaves of these plants turn yellow in the autumn before falling. Masses of these shrubs can be seen on the right-hand side of the Bussey Hill Road opposite the upper end of the Lilac Collection.
**Erica carnea.** In the Shrub Collection this Heath and its white-flowered variety are already in bloom. It is a common European plant which grows not more than five or six inches high but spreads into broad mats, and is the only one of the true Heaths which is really hardy in this climate. It is an excellent plant for the edging of beds and for the spring rock garden.

**Alnus hirsuta.** To persons who know Alders only as they grow naturally in New England these plants are small or large shrubs, but the common European Alder, *Alnus glutinosa*, is at its best a large tree; there are two large tree Alders in the Pacific states and another in Arizona and Mexico, and in Japan and eastern Siberia some of the species are trees. One of these, *Alnus hirsuta*, should be better known for it is perfectly hardy here and has grown more rapidly than any other Japanese trees raised from the seeds brought from Japan by Professor Sargent in 1892. In the Arboretum it is a shapely tree already more than thirty feet high, with smooth, lustrous pale gray bark and spreading branches, and large dark green leaves. Two plants of this Alder now in bloom can be seen on the right-hand side of the Meadow Road in front of the Linden Group. In Japan it is often a tree sixty or seventy feet tall with a trunk two feet in diameter, and there appears to be no reason why it should not grow as large in this country. Of all the tree Alders in the collection it has the most promise of long life and large size, and it should prove a good tree in the northern states to ornament the borders of streams and ponds. In Japan this tree furnishes wood used for many purposes.

The Japanese Cherry-trees in the Arboretum promise a full bloom and will be in flower in about ten days when there will be an opportunity to see here some of the most beautiful of all spring-flowering trees.

Automobiles are not admitted to the Arboretum, but visitors who desire carriages to meet them at the Forest Hills entrance can obtain them by telephoning to P. J. Brady, Jamaica 670, or to Malone & Keane, Jamaica 344.

The subscription to these Bulletins is $1.00 per year, payable in advance.

An illustrated guide to the Arboretum containing a map showing the position of the different groups of plants has been published. It will be found useful to persons unfamiliar with the Arboretum. Copies of this guide can be obtained at the Administration Building in the Arboretum, from the Secretary of the Massachusetts Horticultural Society, 300 Massachusetts Avenue, Boston, from The Houghton, Mifflin Company, 4 Park Street, Boston, and at the office of the Harvard Alumni Bulletin, 18 Plympton Street, Cambridge. Price, 30 cents.