Effects of the winter in the Arboretum. The long and unusual drought of the autumn of 1914 thoroughly ripened the wood of the young branches of deciduous-leaved trees and shrubs, and those plants which produce their flowers on the branches of the previous year promise an unusual crop of flowers. The winter has not been a severe one and there are no losses to report among deciduous-leaved plants, which suffered so severely here during the winter of 1913-14. The dry autumn followed by the unusual drought of March has injured, however, many broad-leaved evergreens, especially Rhododendrons, which have never before suffered so severely in the Arboretum, large plants of the hardiest varieties, which have been growing here for at least twenty-five years, having been killed. The Rhododendron collection is in an exceptionally sheltered and favorable position, and is planted in soil perfectly suited to these plants. They have never suffered from the greater cold of other winters, and the condition of the collection at this time shows that what injures Rhododendrons is want of moisture during the summer and autumn rather than excessive cold, and that only a small number of species and varieties can be successfully cultivated in New England. The list of the varieties which have been killed or seriously injured will appear in a later bulletin.

Native and exotic early spring flowering trees and shrubs. It is interesting to note that our gardens depend almost entirely on foreign trees and shrubs for their greatest beauty in early spring. To this general statement, however, there are a few exceptions. The ground under the Red Maples, *Acer rubrum*, is now red with their fallen flowers, while the Norway Maple (*Acer platanoides*) is just opening its
bright yellow flowers, which will make this tree conspicuous for another week. Two interesting native shrubs, too, the Spice Bush (Benzoin aestivale, sometimes called Lindera Benzoin), and the Leatherwood (Dirca palustris), have been covered for several days with their small bright yellow flowers which appear before or with the unfolding of the leaves. There are large groups of these plants on the right-hand side of the Bussey Hill Road, opposite the upper end of the Lilac Group. Not very often cultivated they deserve a place in every spring garden. Among early-flowering American plants is also to be mentioned the Shad Bush of the Southern states, Amelanchier canadensis. This is the largest and earliest flowering of the whole genus, and is often a tree of considerable size. It is now in flower on the left-hand side of the Meadow Road, entering from the Jamaica Plain Gate, where the general collection of these plants has been arranged. In another week the Arboretum will be gay with the flowers of the Shad Bushes, for these plants have been largely used in the mixed plantation along the drives. With these few exceptions, however, the shrubs which make the greatest show here in the early spring, the Magnolias, Forsythias, Cherries, Peaches, Apples, Pears, Azaleas, Honeysuckles, Lilacs and Berberis are from the Old World.

Magnolias. The earliest of the Magnolias, M. stellata, has been in flower for several days in front of the Administration Building. This is a perfectly hardy, vigorous, wide-spreading shrub and an inhabitant of the mountain slopes of southern Japan. Like the other early-flowering Magnolias, it belongs to that section of the genus in which the flowers appear before the leaves. There is a variety of this plant with pale pink flowers which is also in bloom. The flowers of another Japanese species, Magnolia kobus, and its variety borealis, appear soon after those of M. stellata. The species is a large, irregular growing shrub and is inferior in size and habit to its variety which is a tall and shapely tree with larger flowers. These plants rarely flower freely in this climate and now carry fewer flowers than they did a year ago, and as flowering plants are inferior to the Chinese species and their hybrids which are also in flower. The best known of these Chinese Magnolias is the white-flowered M. denudata, better known in gardens as M. conspicua or as M. Yulan. This is one of the handsomest and hardiest of the spring-flowering trees which are hardy in eastern New England, producing freely every year its large tulip-shaped blossoms which usually escape injury from late frosts, by which the flowers of M. stellata are often discolored. There are a number of hybrids between M. denudata and M. liliflora, usually known as M. obovata or as M. purpurea. These hybrids all have flowers more or less deeply tinged or streaked with rose and bloom a little later than M. denudata. M. Soulangeana is the best known of these hybrids, but there are several others which are equally beautiful. These plants are near the Administration Building at the Jamaica Plain entrance.

Asiatic Cherries. This is one of the most interesting weeks of the whole year in the Arboretum for several of the Chinese and Japanese Cherries are in flower. The first of these plants to open its flowers, Prunus tomentosa, is a native of northern and western China. It is an old inhabitant of the Arboretum, although at this time larger plants
can be seen along the Francis Parkman Road in Jamaica Plain, in the
Boston Park System, than are now to be found in the Arboretum. It
is a large, wide-spreading and perfectly hardy shrub; the flowers open
from pink buds as the leaves begin to unfold, and the bright red flow-
er-stalks and calyx make a charming contrast with the white petals.
The small fruit ripens in June and is scarlet, slightly hairy, sweet and
of good flavor. The hardiness and the ability of this shrub to flourish
in a dry climate makes it valuable in cold regions like the Dakotas,
and it is not impossible that it will in time be made valuable for its
fruit which is as large and of as good flavor as that of the wild Cher-
ries of Europe, from which the best garden cherries have been devel-
oped. Even more beautiful as a flowering plant is another shrub from
northern China, Prunus triloba. This has flowers of the purest pink
and is hardy and free flowering. Apparently first cultivated in the
Arboretum, where seeds were received more than thirty years ago
from Dr. Bretschneider, then at Peking, it has never become common
in gardens, although the less desirable form with double flowers (var.
plena) is to be found in most collections of hardy shrubs. This blooms
a little later than the single-flowered plant from which it was derived
long ago in China. Three Japanese Cherries are in bloom, Prunus
Sargentii, P. pendula, and P. subhirtella. The first is believed by
those who have seen the most of these plants to be the handsomest
of the Cherry trees. It is a large tree with lustrous reddish bark and
broad pink or rose-colored flowers which appear before the leaves;
these are of good size, deep green and lustrous, and in the autumn
turn to shades of crimson or yellow. The fruit ripens in June and is
the size of a pea, bright red when fully grown and black and shining
at maturity. This was once a common tree in the forests of northern
Hondo and of Hokaido and ranging northward into Saghalin. The large
specimens have now nearly all been cut for the valuable wood which this
tree produces. Last year, however, Mr. Wilson found at Koganei, near
Tokyo, an avenue of this tree three miles long which had been planted
in 1735. Some of these trees are from sixty to seventy-five feet tall,
with trunks from nine to thirteen feet round and heads thirty or fifty
feet through. Several double-flowered varieties of this tree cultivated
in Japan have recently been brought to the Arboretum by Mr. Wilson
and promise new beauties for the spring gardens of the United States
and Europe. Prunus Sargentii has proved in Japan the best stock on
which to graft all the Japanese double-flowered Cherries, and in this
country it may prove more valuable for the propagation of the Euro-
pean garden Cherries than the stock usually used for this purpose.
The flowers, unfortunately, retain their beauty for only a short time
and by the end of the week the petals will no doubt be falling. Pru-
nus pendula is a better known plant in American gardens, into which
seedlings of this form with pendulous branches often retain this habit, but sometimes
seedlings appear with more erect and spreading branches, indicating
that it has probably descended from a tree of different habit. The
third of these species, Prunus subhirtella, is rather a large shrub
than a tree. The flowers, which are borne in the greatest profusion,
are similar to those of P. pendula, but the branches are erect. This
when in flower is certainly one of the most beautiful of the whole
group. Very generally and widely cultivated in Japanese gardens, *Prunus subhirtella* is not known anywhere in a wild state. The collection of Cherries is on the right-hand side of the road entering by the Forest Hills Gate.

**Forsythias.** A year ago the flower-buds on many of these plants had been destroyed by the severe cold of the previous winter, now they are all blooming as freely as usual. The handsomest of these plants at this time is a hybrid between two of these species, *Forsythia suspensa Fortunei* and *F. viridissima*, known as *F. intermedia*. There are several forms of this hybrid. The one called *F. intermedia primulina*, with pale canary yellow flowers, a seedling which sprang up spontaneously in the Arboretum a few years ago, is one of the most beautiful of these hybrid forms. *F. europaea*, a vigorous hardy plant with erect branches, is perhaps less beautiful in flower than the Chinese species but is interesting as an European representative of a genus otherwise confined to China and Korea. There is a collection of Forsythias in the Shrub Collection and a large mass of them at the lower end of the Bussey Hill Road.

**Azaleas.** The first of these plants to flower is *Rhododendron mucronulatum* (all the Azaleas are now called Rhododendrons). It is a tall, perfectly hardy, erect shrub with erect slender branches. The flowers are rose color and appear before the leaves. It has been in the Arboretum for more than thirty years but has not before flowered so freely as it has this spring. There is a large group of these plants on the lower side of Azalea Path, and although the flowers are beginning to fade it is well worth an early visit. Another Azalea from northeastern Asia, *Rhododendron dahuricum*, with rather smaller, darker colored flowers than the last to which it is closely related, has never flowered so well before in the Arboretum. There is a group of these plants on the upper side of Azalea Path.

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 recently 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, at the Old Corner Bookstore, Bromfield Street, Boston, and at the office of the Harvard Alumni Bulletin, 50 State Street, Boston. Price, 30 cents.