Effects of the severe winter. Most of the Taxads which have been
grown successfully in the Arboretum have suffered from the cold of
the winter. All the forms of the Japanese Taxus cuspidata, however,
are now as green and fresh as they were in October. As the years
pass the confidence in the value of this plant increases and it has never
been as great as it is this spring. Among all the plants which Japan
has contributed to the gardens of the eastern United States no other
is so generally valuable. Fortunately American nurserymen are at last
beginning to realize that this Yew has some commercial value, and it
will soon be within the reach of everyone who has a garden or wants
to plant the best possible evergreen hedge for New England. The
form of this Yew (var. chinensis) introduced by Wilson from western
China is less hardy than the Japanese plant. In a collection of young
plants of the Chinese form, in as protected a position as could be
found in the Arboretum, some are slightly injured and others are dead.
It is not probable that this fine tree, therefore, will ever become es-
established in Massachusetts. On all the forms of the European Yew
(Taxus baccata) there are dead leaves and dead or injured branches.
All the plants of T. baccata erecta have been killed, and there are a
few dead branches even on T. baccata repandens, the plant with wide-
spreading, semiprostrate stems which has lived in this climate for sev-
eral years without injury and has been considered here the hardest
and most desirable of all the forms of the European Yew for New
England. Plants of the Canadian Yew (T. canadensis), the so-called
Ground Hemlock of northern woods, planted in the shade or in full
exposure to the sun, have been badly disfigured as the tips of most of
the branches and all the upper leaves have been killed. The leaves on
upper branches of the Japanese Torreya mucifera are dry and begin-
ning to turn brown, but the buds appear to be uninjured and the plants may recover. It has not suffered here before and for the last two or three years has been producing fruit in the Arboretum. The California Torreya (*T. californica*), which has been nursed along in a sheltered position for years and has suffered more or less every winter, appears to have at last entirely succumbed. Young plants in a sheltered position of the Japanese *Cephalotaxus drupacea* are little injured but the handsomer *C. Fortunei* from western China has suffered and it is doubtful if this fine tree will live through many years in this climate.

**Broad-leaved Evergreens.** As it was natural to expect, the plants of this class have been more injured by the winter than any others, for with few exceptions they cannot be successfully grown in this climate under even the most favorable conditions. *Ilex opaca*, which has grown well in the Arboretum for many years where it has been the only broad-leaved evergreen tree which has lived here, has suffered seriously. Nearly all the leaves have been killed and some of the plants appear to be dead. The large plants of the Japanese *Ilex cre-nata* on Azalea Path, which were raised from seed at the Arboretum twenty-five years ago, have been so badly injured that it is doubtful if they can recover. The Inkberry (*Ilex glabra*), a common shrub in the region of the coast from New Hampshire to Texas, has lost the ends of many branches and most of its upper leaves. For more than twenty years there have been splendid specimens of this beautiful shrub in the Arboretum where it has never been injured before and has been considered one of the best evergreen shrubs which can be grown in this climate. Plants of an evergreen Holly (*Ilex pedunculata*), introduced by Wilson from western China and planted on Hickory Path near Centre Street, have, however, not been injured by the winter. This is a handsome tree with long-stalked red fruits, and is distributed through Japan and western China. Judging by our experience here with other evergreen Hollies, the chances that it will ever grow to maturity are not very good. For the first time in the Arboretum there are brown leaves and dead branches and flower-buds on some of the Laurels (*Kalmia latifolia*). The damage is not serious but it is interesting as showing how the hardiest native plants, even when planted in exceptionally good positions, may be injured by a winter like the last which has killed also the ends of the branches of such common New England evergreen shrubs as the little Sheep Laurel (*Kalmia angustifolia*) and the Leather Leaf (*Chamaedaphne calyculata*). The leaves of *Leucothoe Catesbaei* are badly browned even on plants in moist shady positions which this species prefers. A native of the southern Appalachian forests, it has been considered one of the hardiest and most satisfactory broad-leaved evergreens which could be planted in this climate. *Leucothoe azillaris* has also lost its leaves but will probably recover. *Pieris* or *Andromeda floribunda* is uninjured and is now covered with flowers, and its condition confirms the belief here that this is one of the hardiest, handsomest and most desirable broad-leaved evergreen shrubs which can be grown in this part of the country. Its Japanese relative, *Pierus japonica*, seems equally hardy, but its larger and more beautiful flowers open earlier and are often injured by spring frosts.
**Evergreen Barberries.** The four Chinese evergreen Barberries, *Berberis Julianae*, B. *Sargentiana*, B. *verruculosa* and B. *Gagnepainii*, from which so much has been expected, have suffered seriously. *B. Julianae* and *B. Sargentiana* will probably not recover, and there is little hope that much garden beauty will ever be obtained in this region from evergreen Barberries, for all the Mahonias which have been grown here are in unusually bad condition this spring, with the exception of the dwarf *Mahonia* or *Berberis repens* from the Rocky Mountains, and even this has lost many of its leaves. All the forms of the European Box, although carefully protected, have suffered badly and some have been killed. Even the Japanese Box (*Buxus japonica*), which has been growing in an exposed position here for twenty years without protection, will lose for the first time some of its leaves from the ends of the branches. This handsome plant has suffered, however, less than might have been expected, and if Box is to be planted in eastern Massachusetts with the expectation that it will be a permanent garden ornament it is this Japanese species which must be used. The Chinese climbing Honeysuckle (*Lonicera Henryi*), which had proved perfectly hardy until last winter and from which much was expected, has lost all its leaves, but as its stems are still alive it may recover. *Teucrium chamaedrys* and *Salvia officinalis* are nearly killed, and *Daphne cneorum*, which has usually done well in the Arboretum, has suffered seriously in the Shrub Collection and on Azalea Path. The two evergreen Chinese Viburnums which have lived in the Arboretum for several years, *Viburnum rhytidophyllum* and *V. buddleifolium*, have lost all their leaves but may possibly recover.

Thanks probably to the abundant rains of the summer and autumn, the Rhododendrons in the Arboretum have suffered less than they did three years ago, although in some of the gardens near Boston the loss of these plants has been more serious than ever before, whole plantations which have been growing for thirty or forty years having been destroyed. In the Arboretum the only species which has suffered is *R. micranthum*, the only evergreen Chinese Rhododendron which has ever lived long enough in the Arboretum to flower and which has now lost many of its upper branches. There are dead branches on some of the Catawbiense hybrids, and among them, in addition to a number of hybrid seedlings sent to the Arboretum for trial by an English nursery, the following have been killed: James Smith, Marshall Brooks, Mrs. Thomas Agnew, Marquis of Waterford and Gomer Waterer. One specimen of Mrs. C. S. Sargent, which has always been considered one of the hardiest of all the Catawbiense hybrids, has been so injured that it will have to be removed. *Rhododendron azaleoides*, or *fragrans*, one of the hybrids between a Rhododendron and an Azalea, has also been killed.

**Prunus incisa** has bloomed in the Arboretum every spring for three or four years but has never been as full of flowers or as beautiful as it has been during the present week. This Cherry is a native of Japan and is abundant on the eastern and southern slopes of Fuji-san and on the Hakone Mountains. It is a large shrub or under favorable conditions a small tree twenty-five or thirty feet high; the flowers appear before the deeply cut leaves in drooping clusters; their calyx is bright
red; the petals are white or occasionally tinged with rose color, and the anthers are bright yellow. The petals fall early but the calyx, which gradually grows brighter in color, remains for some time on the young fruit and is showy. *Prunus incisa* has been perfectly hardy here and none of the flower-buds were injured by the cold of last winter. It has the advantage, too, of flowering while still a small shrub. This Cherry has remained rare in American and European gardens and appears to be still little known.

**Plums.** The flower-buds of few Plum-trees have been injured and these trees promise to bloom unusually well this year. The first to flower have been the Canadian Cherry (*Prunus nigra*) and the Chinese *Prunus salicina*, the parent of the so-called Japanese Plums of pomologists. These will soon be followed by *Prunus alleghaniana, P. americana, P. Watsonii, P. Munsoniana, P. hortulana, P. domestica*, and several others. The Plums are planted with the Apricots, which are also beginning to bloom, next the Cherries, near the junction of the Meadow and Valley Roads.

A pink-flowered Pear-tree. Among the Pear-trees raised from the seeds collected by Wilson in western China there are plants in the Peter's Hill Nursery and on the southern slope of Bussey Hill which have bloomed this year for the first time and have been conspicuous for their pale pink flowers which open from rose-colored buds. The flowers of all described species of *Pyrus* are pure white and this pink-flowered form is an interesting addition to the list of trees with showy flowers. It has been considered a variety of *Pyrus Calleryana* but differs from that Pear-tree in its smoother red brown bark, in the dense coat of tomentum which covers the branchlets, and in its earlier pink flowers not more than three-quarters of an inch in diameter, and, it is possible that when the fruit is known, it may prove a new species. The Chinese Pears have handsome foliage and beautiful flowers, and they are all excellent hardy ornamental trees in the Arboretum. They will bloom well this year, and the large specimen of *P. ovoides* near the Forest Hills entrance has been covered with flowers during the week.

**Some Maple Flowers.** It is not often that the Sugar Maple (*Acer saccharum*) in Greater Boston so completely covers itself as it has this spring with its long gracefully drooping clusters of pale yellow flowers which early in May make this tree, although now less conspicuous than in the autumn, a charming feature of the northern forest. A true lover of the country, life in cities and their suburbs has little attraction for the Sugar Maple. It needs the free and pure air of the forest and of the country roadside, and finds its greatest happiness on the low hills of northern New England and Michigan, or in the rich protected valleys of the Appalachian Mountains. In such positions no Maple tree surpasses it in size and beauty, and few trees equal it in the splendor of the coloring of its autumn foliage. The large, cup-shaped bright red flowers of one of the forms of the Japanese *Acer diabolicum* (var. *pupurascens*) have been very beautiful this week, and as a spring-flowering tree this small Maple well deserves more general cultivation. The leaves, too, are large and handsome. There are three plants in the Maple Collection, and a number of others in the mixed plantations near the top of Peter's Hill.