Amelanchiers. The forests of eastern North America surpass those of other regions of the northern hemisphere in the number of small trees and shrubs which enliven them with beautiful and often conspicuous flowers. Eastern North America is the home of the Hawthorns which grow here in an almost unbelievable number of species with innumerable individuals; in the Missouri-Texas region are more species and varieties of Plums, great and small, than in all the other countries of the world; in early spring swamps and their borders and low woods are gay with the bright yellow flowers on the leafless branches of the Spice Bush (Benzoin aestivale), the Leatherwood (Dirca palustris) and the Fragrant Sumach (Rhus canadensis). No other part of the world can boast a forest undergrowth more beautiful than that made by the so-called Flowering Dogwood (Cornus florida), one of the commonest of the small trees in all the region from southern New England to eastern Texas. Even Japan cannot make a braver and more varied show of Azaleas than our south Atlantic and Gulf States; poor in Rhododendrons and these of comparative insignificance, in its Laurel (Kalmia latifolia) eastern America possesses a broad-leaved evergreen shrub or small tree which grows naturally from New Brunswick to Louisiana and is not surpassed by many plants in the beauty of its flowers. Amelanchier is another plant in which North America has almost a monopoly; one small shrubby species grows on the mountains of central Europe, and there is another shrubby species in China and Japan. All the other species are natives of North America where Amelanchiers grow with many species from the Atlantic to the Pacific, and from Newfoundland to the Gulf States. Some of the species are trees and others large or small shrubs.
they flower in the spring before the leaves appear or when they are partly grown, or, as in the case of a few species, when the trees are nearly fully grown, the period of flowering of the different species extending through several weeks. The species all have handsome flowers, with long delicate white petals, and small, dark blue, or nearly black pome-like fruit open at the top, with flesh which in most of the species is sweet and edible. It is these edible fruits which probably have earned for these plants one of their popular names, Service Berry. Shad Bush, another of their popular names, came from the fact that they were in flower when the shad began to ascend the rivers flowing into the Atlantic Ocean. *Amelanchier canadensis*, the first species to bloom in the Arboretum, has been in flower for several days. It is a tree which occasionally grows to the height of sixty feet with a tall trunk eighteen inches in diameter. The leaves begin to unfold as the flowers open and are then covered with pale gray silky hairs, making the whole plant look white at this time of the year. This beautiful tree does not grow naturally nearer Boston than the western part of the state; it is common in western New York, and it is the common and often the only species in the southern states in which it grows to the Gulf coast. Owing to an old confusion in determination and names this fine tree, which was originally named by Linnaeus, has been rare in gardens, an entirely different plant having long appeared in books and gardens under the name of *Amelanchier canadensis*. This is also a fine tree, differing conspicuously from *A. canadensis* in the red color of the young leaves which are destitute or nearly destitute of any hairy covering. This tree is now called by botanists *A. laevis*. It is one of the native trees of the Arboretum, and there are a number of specimens growing naturally on the bank above the Crabapples on the left-hand side of the Forest Hills Road which begin to flower a few days later than *A. canadensis*, and are easily recognized by the color of the young leaves. Another species which is a native plant in the Arboretum, *A. obovalis*, is a large shrub rather than a tree with young leaves like those of *A. canadensis* covered with white silky hairs. Large numbers of this shrub have been planted along the drives and in the other Arboretum shrubberies; they will still be in bloom when this Bulletin reaches its Boston readers and will make this week one of the pleasantest of the year to visit the Arboretum. Five or six other species of the eastern states are now well established in the Arboretum collection on the grass path which follows the left-hand side of the Meadow Road; they are small shrubs rarely more than five or six feet high, in some species spreading from the roots into clumps of considerable size. They are all delightful plants well suited for the decoration of small gardens or the margins of shrubberies. Generally, however, they are unknown to garden lovers.

**Some Early-flowering Viburnums.** The first Viburnum to bloom in the Arboretum this year is *Viburnum alnifolium*, the Hobble Bush or Moosewood of cold, wet northern woods. It is a large shrub spreading by shoots from the roots, with broad flat clusters of small flowers surrounded by a ring of large pure white neutral flowers, dark green leaves with prominent veins, which turn orange and scarlet in the autumn,
and fruit in drooping clusters, bright red at first when fully grown and dark blue or nearly black at maturity. This is one of the handsomest of the American Viburnums but it has proved a difficult plant to establish here, although in other Massachusetts gardens it has grown better than it has in the Arboretum where, however, it at last appears to have become accustomed to its surroundings. In Japan there is a Viburnum (*V. furcatum*) closely related to and very much like the Hobble Bush, from which it chiefly differs in the shorter stamens which are hardly more than half the length of the corolla, and in the deep groove on the ventral side of the stone of the fruit. *Viburnum furcatum* in Japan, where it grows from the mountains of central Hondo to Sakhalin, is a shrub sometimes ten or twelve feet high with smooth, red-brown branches and branchlets. Like its American relative, this Japanese Viburnum has proved difficult to establish, but a plant is now opening its flowers here, two or three days later than those of *V. alnifolium*, and for the first time in the Arboretum. In a few days the flowers of another early-flowering species, *V. Carlesii*, will open. This shrub has been found only among seashore rocks in two localities in Korea and has already become a popular garden plant in this country and Europe. Its real value is found in the white, extremely fragrant flowers which are arranged in small compact clusters and open from rose-colored buds. As the buds in the cluster do not all open at once the pink buds among the white flowers add to the beauty of this shrub in early spring. Late in the autumn the small dull olive green leaves turn dark rich wine color.

**Early Azaleas.** The first Azalea to open its flowers this spring is the Korean *Rhododendron* (all Azaleas are now called Rhododendrons) *pokhavense*. This Azalea, which is a common plant on the bare mountain slopes in the neighborhood of Seoul, was first raised at the Arboretum in 1905 from seeds collected in Korea by Mr. J. G. Jack. As it grows here this Azalea is a low, wide, compact bush which never fails to cover itself with its large, rose-pink flowers. Some persons do not find this color pleasing, but the flowers of no other Azalea in the collection have such a strong and pleasant fragrance. There is a considerable number of these plants in the bed on the upper side of Azalea Path. The plants ripen good crops of seeds; the seedlings are not difficult to raise and there is no reason why this plant should not be more common in gardens than it is at present. The flower-buds of *Rhododendron* (Azalea) *Schlippenbachii* will open a few days later than those of *R. pokhavanense*. This Azalea grows on the exposed grass-covered cliffs of the east coast of Korea as a low bush with branches clinging to the ground and far northward as a tall shrub sometimes twelve or fifteen feet high under trees in open or dense forests. It grows further north than other Asiatic Azaleas, and only the North American Rhodora reaches a higher latitude. The flowers of this Azalea appear before the leaves and are pale pink marked at the base of the upper lobes of the corolla with dark spots and are about three inches in diameter. There can be little doubt of the hardiness of this plant, for in Korea it grows to its largest size where the winter temperature often falls to 30° below zero Fahrenheit; and in the Arboretum the flower-
buds have not been injured by the low temperature of recent winters. There is every reason to believe therefore that it will be possible to cultivate R. Schlippenbachii anywhere in the northern states where the soil is not impregnated with lime. If this prediction proves true New England will be able to add to its gardens one of the most beautiful of all the Azaleas. This plant, unfortunately, is still rare in gardens. Although known to Russian botanists as early as 1872, it did not reach England until twenty years later when the late J. H. Veitch sent to London a plant which he had found in a nursery garden near Tokyo. The plants in the Arboretum were raised here from seeds brought by Mr. Jack from Korea, and at different times a few plants have reached this country from the Yokohama Nursery Company. Fortunately Mr. Wilson during his journey in Korea in 1917 secured a large quantity of the seeds of this Azalea; this has been widely distributed by the Arboretum in the United States and Europe and has produced several thousand plants. There is reason to hope, therefore, that this loveliest of the hardy Asiatic Azaleas will become a common inhabitant of northern gardens.

**Broad-leaved Evergreens.** In addition to the two Rhododendrons with evergreen leaves mentioned in the first Bulletin of the present year there are only two broad-leaved evergreen plants which flower here in April and are perfectly hardy. They are *Andromeda floribunda* and the Leather Leaf (*Chamaedaphne calyculata*). The former is a native of the high southern Appalachian region and has been known in gardens for at least a century; it is not, however, often seen in those of New England in which, with the exception of the Laurel (*Kalmia*) and a few Rhododendrons, it is the handsomest evergreen shrub which can be successfully grown. It is beautiful, too, throughout the year for the dark green leaves, although not large, are always lustrous; the flower-buds, which are formed in the autumn, are large, nearly white, and conspicuous during the winter, and open into bell-shaped white flowers arranged in short terminal clusters which cover the plants during several weeks and are not injured by spring frost. This Andromeda under favorable conditions sometimes grows five or six feet high, with a diameter often greater than its height. It is a good subject to use as a single specimen or on the margin of beds of taller growing evergreens, like Rhododendrons or Kalmias, and no broad-leaved evergreen is better suited for the decoration of large rock gardens. The related species from Japan, *Andromeda japonica*, is a larger plant, sometimes tree-like in growth in its native country, with larger and more beautiful flowers which unfortunately in this climate are generally ruined by spring frosts. The Leather Leaf is an inhabitant of cold, wet northern bogs which it sometimes covers almost to the exclusion of other plants. It is a dwarf shrub with small obtuse scurfy leaves and small, white, axillary flowers. The Leather Leaf is a less beautiful plant than *Andromeda floribunda* but it is a hardy, broad-leaved evergreen and therefore valuable in a region where so few such plants can be successfully grown. Although naturally a bog plant, the Leather Leaf flourishes when planted in drier soil and the plant in the Shrub Collection and its dwarf form (*var. minor*) are unusually full of flowers this spring.