Evergreen Rhododendrons. Only a comparatively few of these plants can be cultivated in New England. Three species of eastern North America are hardy here, as are Rhododendron Smirnovii of the Caucasus, and hybrids of still uncertain origin of R. caucasicum of the same region. In southwestern China is found the greatest number of these plants, and hundreds of new species have been discovered there in recent years and introduced into England where many of them have already flowered in Cornwall, a region particularly well suited to the growth of these evergreens. Unfortunately only one Chinese species, R. micranthum, from northern and western China, which has little to recommend it as a garden plant, is hardy in the Arboretum. Most persons in this part of the country who think and talk about Rhododendrons have in mind the hybrids raised in England in great variety between the eastern American R. catawbiense and primarily one of the Himalayan species, R. arborescens. There are hundreds of these Rhododendrons with beautiful foliage and flowers varying from deep red to pink, rose-color, dark purple and white. They are usually grafted on R. ponticum, a tender plant which appears to affect the hardiness of these hybrids. The first Anthony Waterer of the Knaphill Nursery at Woking in Surrey, from whom most of the large collections of these hybrids have been obtained in this country, used to propagate his best varieties by layers. Such plants have proved harder and longer lived than the plants grafted on R. ponticum stock. Among the handsomest and hardest of the Waterer Rhododendrons may be mentioned Atrosanguineum, Charles Dickens, Mrs. C. S. Sargent, Henrietta Sargent, Catawbiense album, Album elegans, Roseum elegans, H. W. Sargent,
Discolor, Melton, Album grandiflorum, Purpureum elegans and Lady Armstrong. In November, 1908, the Arboretum received from T. J. Seidel, in whose nursery near Dresden is one of the greatest collections of hardy Rhododendrons, a number of his catawbiense hybrids. Seidel uses as stock for his hybrids one of the hybrids of *R. caucasicum* called Cunningham's White, which was raised about 1880 by James Cunningham in his nursery near Edinburgh by crossing *R. caucasicum* with *R. ponticum* it is said. This makes a hardier stock than *R. ponticum* and is easily and cheaply propagated from cuttings. The plants on this stock are dwarfer than those which have been raised in England and appear to be generally hardier. In the Seidel collection in the Arboretum are the following named varieties: Adalbert, Adam, Alarich, Albert, Annedore, Anton, Arno, Attila, August, Bella, Bismarck, Calliope, Daisy, Desiderius, Diana, Donar, Echee, Eli, Eva, Fee and Viola. There is much difficulty in this country with the cultivation of both the English and German hybrid Rhododendrons. The leaves suffer seriously from the attacks of the lace-wing fly and to destroy this it is necessary to spray the plants two or three times during the year. The plants require a deep mulch in winter, and some of the varieties planted in exposed situations are better for a winter covering of evergreen branches. It is no longer possible under the Federal laws to import these plants with soil at their roots and American nurserymen who may still have a few plants ask such exorbitant prices for them that it is foolish to buy them. In the future perhaps some American nurserymen will take up the propagation of these hybrids on stock of Cunningham's White or some other of the Caucasian hybrids, but until this is done the cultivation of plants established in this country or of new collections of these plants is not promising.

**Rhododendron Smirnowii.** This is a plant from which a great deal can be expected here. It has been growing in the Arboretum for several years and has not suffered from cold or drought. When the plant is fully exposed to the sun the leaves often droop and their edges in-fold, and it does better in partial shade. The leaves are pale grayish green above and below are thickly covered with pale felt which successfully protects them from the attacks of the lace-wing fly. The flowers are of good size and of pleasant shades of pink or rosy pink, and are borne in large clusters. As compared with the dark green leaves of *R. catawbiense* and its hybrids those of this plant are less attractive, but the flowers are beautiful in color and are equally large. Several hybrids of *R. Smirnowii* and hybrids of *R. catawbiense* have been raised in Europe and there are a few of these in the Arboretum collection. They have proved to be good garden plants here, flowering earlier than *R. Smirnowii* and producing larger pink flowers. They have never been injured in the Arboretum, but as there is only a trace of the felt left on their leaves they will probably suffer from the lace-wing fly. *R. Smirnowii* is now at its best. The flowers of *R. catawbiense* and many of its hybrids are opening, but the flowers of *R. Carolinae* have already faded and those of *R. maximum* will not be out for another fortnight. The Rhododendron Collection is planted at the eastern base of Hemlock Hill and extends along the Bussey Brook to the corner of Bussey Street. The southern end of the collection is
close to the South Street entrance to the Arboretum and is within a short walk of the Forest Hills Station.

**Azaleas**, which all botanists call Rhododendrons now, are still conspicuous features in the Arboretum. As the flowers of *R. roseum* and *R. nudiflorum* begin to fade those of *R. calendulacea* have already opened their orange, yellow or reddish flowers. This shrub is an inhabitant of the mountain regions from southern New York to Georgia, and is often extremely abundant in North Carolina and Tennessee. In flower it is the most showy of the American Azaleas in the Arboretum and one of the most beautiful of all flowering shrubs. This plant has already been largely planted on the southern slope of Bussey Hill, and it is proposed to make it a special feature of the Arboretum. The conspicuous flowers of different shades of red of the Japanese *R. Kaempferi*, which has never bloomed more profusely in the Arboretum than it has this year, are beginning to fade and are followed by those of another Japanese species, *R. japonicum*. Although the flowers of this species are less brilliant than those of the better known *R. Kaempferi*, it is probably the handsomest of the Japanese Azaleas. The flowers are flame color and are more than three inches in diameter. As it grows here this Azalea is a round-topped, rather compact hardy shrub blooming freely every year. There is a bright yellow variety (var. *aureum*) which is also in the collection. *R. japonicum* was raised at the Arboretum from seeds collected in Japan by Professor Sargent in 1892 and has been growing here as long as *R. Kaempferi*. Long confused with the hybrid *Azalea mollis* of gardens, less attention has been paid to it, and it is only lately that its specific characters and value have been understood. One of the parents of the hybrid *A. mollis*, it is a handsomer, longer-lived and more satisfactory plant than that popular and well known Azalea which lives here only a short time. In gardens *R. japonicum* is still one of the rarest of all the hardy Azaleas. Many of the so-called Ghent Azaleas with yellow and different shades of red flowers are also in bloom. These are excellent plants raised by crossing in Europe many years ago various North American species with one of the yellow-flowered species, possibly *R. luteum or japonicum*. The origin of these plants, however, is very uncertain. They are among the best of the hardy garden Azaleas and are still occasionally met with in this country.

**Arborescent Viburnums.** Four Viburnums assume the habit of small trees in the Arboretum; three of these are eastern American, *V. prunifolium*, *V. Lentago*, *V. rufidulum*, and one is Japanese, *V. Sieboldii*. *V. prunifolium*, which is the first to bloom, is a tree often thirty feet high, with a short trunk usually less than a foot in diameter, rigid spreading branches beset with slender spine-like branchlets, thick, dark green, lustrous leaves which, handsome in summer, are splendid in the autumn with their dark red or scarlet colors. In the autumn the plants are conspicuous, too, from the red stemmed drooping clusters of dark blue fruit covered with a glaucous bloom and from half an inch to three-quarters of an inch long. This plant takes kindly to cultivation and is quite hardy north of the region of its natural distribution which is in southern Connecticut. It has generally escaped the...
attention of American nurserymen who in recent years have made better known our northern arborescent *V. Lentago*, the Sheepberry or Nannyberry a usually larger and for some persons a handsomer plant than the Black Haw. The flowers, which are arranged in larger and rather flatter clusters, are pale cream color and not white, and the fruit, which is as handsome as that of the Black Haw, is rather larger. The leaves, too, are larger and equally lustrous, and also assume brilliant autumn colors. At the end of May and early in June the Arboretum owes much of its beauty to the flowers of the Sheepberry which has been planted in large numbers along the drives and in the border plantations, and is now covered with flowers. *Viburnum Jackii*, which is evidently a hybrid between *V. Lentago* and *V. prunifolium*, with characters intermediate between those of its parents, was detected a few years ago by Professor Jack in one of the Arboretum plantations. An interesting plant, it is not more valuable for the decoration of gardens than either of its parents. More beautiful than the Black Haw or the Nannyberry, the common tree Viburnum of the southern states, *V. rufidulum* is perhaps the handsomest of all the Viburnums with deciduous leaves. When grown under the most favorable conditions it is a tree often forty feet high with a tall stout trunk and branches which spread nearly at right angles from it. The leaves are thick, dark green and lustrous on the upper surface, with winged stalks covered, as are the winter-buds, with a thick felt of rusty brown hairs. The flowers are creamy white and the fruit is dark blue with a glaucous bloom. This Viburnum has been growing in sheltered positions in the Arboretum for several years and has flowered here several times. The Japanese *V. Sieboldii* under favorable conditions will grow to the height of twenty-five feet, although it is often a shrub in habit. For the decoration of American gardens this Japanese plant is inferior to either of the three American arborescent species.

*Symlocos paniculata* is the only representative of a family of plants which can be successfully grown in the Arboretum. It is a native of Japan and western China, and grows also on the Himalayas. The Arboretum plants are Japanese, and this form was introduced into the Parsons Nursery at Flushing, Long Island, at least fifty years ago. Although a distinct and beautiful plant, it appears to be still little known in gardens, and in England where it flowers freely it does not produce fruit. In this country it will not grow in soil impregnated with lime. In the Arboretum this Symlocos is a shrub from twelve to fifteen feet tall and broad, branched to the ground, with dark green leaves, axillary clusters of small white flowers which are followed in the autumn by beautiful blue fruit about a third of an inch in diameter. The unusual color of the fruit is probably its chief attraction. There is a plant in the Shrub Collection, but the three largest specimens are on the left hand side of the Bussey drive, just above the Lilacs, and in the grass border between the drive and the walk, and one of these plants is now more fully covered with flowers than any of them have ever been covered before.