Hybrid Rhododendrons are by common consent among the noblest broad-leaf evergreens that can be grown in northern gardens. They are largely the product of crossing and intercrossing the two American species, *R. catawbiense* and *R. maximum*, with the Himalayan *R. arboreum*, and the Eurasian *R. ponticum* and *R. caucasicum* from the Caucasus. They owe their red and crimson colors chiefly to the Himalayan and their hardiness to the blood of the American and Caucasian species. Most of the standard hardy sorts growing in the Arboretum were raised in England, mainly by the firm of Anthony Waterer & Sons, more than three-quarters of a century ago. Mr. E. S. Rand, Jr., wrote his book on Rhododendrons in 1871 and those who turn to its pages will note that with few exceptions the hardy and reliable varieties we know today are mentioned there.

Since the Bulletins were first issued reference has been made each year to these Rhododendrons. Their behavior in the Arboretum has been set down together with the experiences of half a century in cultivating these plants. It cannot be said that success has crowned the persistent efforts of the Arboretum. Indeed, fewer varieties are growing there today than a quarter of a century ago. The site, under the lee of Hemlock Hill, facing more or less north and to some extent protected from the sun in March, would appear to be perfect but the Rhododendrons do not flourish as they should. The toughest and hardiest varieties make a good showing each succeeding year but dead branches and brown leaves are too much in evidence on many of them every spring. In England, where Rhododendrons are special favorites, great progress in their culture has been made during the past twenty-five years. It has been found that wind is the curse of these plants and that greater success is attained when they are planted through thin woods, especially Oak woods, where the ground is moist and cool throughout the year and where the branches of the trees break the direct rays of the sun. Too much shade is detrimental to the setting of a crop of flower-buds but not enough induces browning of the foliage. Also, it has been found that the best way of mulching Rhododendrons is by laying rather stout branches about the roots and sprinkling over them a
modicum of oak leaves. Under this treatment the known hardy hybrids give better results; many formerly thought to be tender prove quite hardy and hundreds of new species recently discovered and introduced from western China grow happily. It is evident that we have something to learn from the recent successes of Rhododendron enthusiasts in the British Isles. In fact we might try their experiments with every probability of success greater than we now enjoy with these favored plants. Rand in his book enumerates, with the exception of Mrs. Charles Sargent, Henrietta Sargent, Mrs. Harry Ingersoll, Catawbiense album and Boule de Neige, all the really hardy sorts of first-class quality grown in the Arboretum. All of these are of foreign origin, indeed, so far as the Arboretum is aware, no first-class variety of perfect hardiness in Massachusetts has been raised in this country. This is little to the credit of our nurserymen. Prior to quarantine No. 37 going into effect the supply of Rhododendrons for this country was annually imported from Europe. When importation ceased stocks were speedily sold out. Today it is exceedingly difficult to buy sizeable hybrid Rhododendrons of any sort in America.

Anthony Waterer used to propagate his plants mainly by layering, but nowadays R. ponticum, unfortunately tender in New England, is largely used as an understock. No other understock has yet been found equal to this Eurasian species, yet for us its use is unwise, and, if none other is available, layering should be resorted to. With the exception of a collection of indifferent quality which came from Germany in 1908, the Arboretum has received no really hardy sorts that have originated later than 1885. No one will assume that the possibilities of raising new and worthwhile varieties have been exhausted. It is simply that the subject has been neglected and it is high time that it was taken up seriously in this country. Indeed, if New England is ever to enjoy really hardy hybrid Rhododendrons in variety they will have to be raised there. A splendid field for the hybridist and for the younger generation of nurserymen is open. By crossing and intercrossing the hardest and toughest of the hybrids we now enjoy with some of the known hardy species like R. Smirnovii, R. Metternichii, R. brachycarpum and R. carolinianum, there is every probability of largely increasing the list of hardy hybrid Rhododendrons well-suited to the climate of Massachusetts and southward. Until some enterprise is shown in this direction Rhododendron lovers will be left to deplore the paucity of good sorts available for their gardens. Today, so far as the Arboretum's experiences go, the following rank among the best of the hybrid Rhododendrons: with red flowers—Atrosanguineum, Charles Dickens, H. W. Sargent; with reddish flowers—Caractacus; with rose-colored flowers—Roseum elegans, Lady Armstrong; with pink flowers—Mrs. Charles Sargent, Henrietta Sargent; with dark purple flowers—Purpureum grandiflorum, Purpureum Elegans; with light purple flowers—Everestianum; with white or nearly white flowers—Album Elegans, Album Grandiflorum, Catawbiense Album. Earlier than these to blossom are the so-called Caucasian Hybrids of which Mont Blanc, Boule de Neige, Coriaceum, Glennyanum and Cassiope, all with white or
Hybrid Caucasian Rhododendron, Glennyanium
nearly white flowers. These and other varieties of less value are now in blossom in the collection at the foot of Hemlock Hill, which is easily reached from South Street Gate.

**Styrax obassia.** A shapely specimen some 18 feet tall of this Japanese tree is now in bloom on Bussey Hill. It has shortly stalked, broadly ovate leaves, each 4 to 7 inches long and as many broad, dark green above and silvery gray below. The flowers are bell-shaped, arranged in erect or sub-erect racemes 4 to 6 inches long. The corolla is of the purest white, so too, are the filaments, but the anthers are clear yellow. The flower racemes, although produced in great quantity are somewhat hidden by the bold foliage.

**Styrax japonica** is a bushy tree of moderate size, seldom exceeding 30 feet in height and as much in diameter, which is common on the mountains of Japan. It is also found in southern Korea and in central China. It has leaves light green on both surfaces, more or less ovate, lance-shaped and each from 2 to 3 inches in length. The bell-shaped flowers are borne in cymose clusters at the ends of every branchlet and the corolla is of pure, waxy white. No other tree is more abundant of blossoms and viewed from below when in full flower its myriads of pure white bells present a charming picture as anyone who examines the large specimen on Centre Street Path will agree. The tree fruits freely each autumn and thousands of seedlings spring up spontaneously beneath its shade. It has been growing in the Arboretum since 1892 and except in early youth has not suffered winter injury. Like many other plants these Styrax are apt to winterkill when young. Moreover, they do not transplant readily from open ground, so it is best to grow them along in pots. These two species of Styrax are among the most lovely of the lesser trees that can be grown in the climate of Massachusetts and are well worth a little extra trouble to establish. The genus is widely distributed, several species being native of eastern North America and many in central and western China but the above only are properly hardy in the Arboretum.

**Syringa Wolfii.** This handsome species, native of the woodlands of central and northern Korea and adjacent Manchuria, is now in flower above the Forsythia group. It has large oblong to ovate-lance-shaped leaves, dark green above and pale on the underside, and much branched panicles of dark lilac-purple flowers. The lateral branches of the panicles droop somewhat and the individual flower is tubular, dilated at the mouth with incurved, somewhat hooked, corolla lobes. This plant was discovered by V. L. Komarov and by him introduced into the Botanic Garden at St. Petersbourg sometime before 1910. A plant was sent to the Arboretum but whether it was the true species or not is uncertain for the plant has been lost. That now in flower was raised from seeds collected in Korea by Wilson in 1917. Besides the type there is a form distinguished by the presence of a few hairs along the mid-rib on the underside of the leaf. *S. Wolfii* is a handsome and very hardy shrub but is only one of numerous species of Lilac that are well worth a place in gardens. E. H. W.