Rhododendrons. The flowers of some of the early flowering evergreen Rhododendrons have already faded and those of *R. maximum* will not be in bloom for several weeks, but when this Bulletin reaches its Massachusetts readers a large number of the varieties of the Catawbiense hybrids will be in flower; and these plants are carrying this year an exceptionally large number of flower-buds. Of the species of evergreen Rhododendrons only the eastern American *R. maximum*, *R. catawbiense*, *R. carolinianum*, the mountain form of *R. minus*, the Caucasian *R. Smirnovii* and *R. caucasicum*, at least in some of its forms, are truly hardy in Massachusetts. The two species of the European Alps, *R. hirsutum* and *R. ferrugineum* can live here sometimes for a number of years but they are usually short-lived and unsatisfactory plants in this climate. The Japanese *R. brachycarpum* formerly lived in Massachusetts gardens for many years and longer trials will probably show that it can be successfully cultivated in this climate. Including this still doubtful Japanese species and the two little European species, there are only nine species of this great genus of several hundred species hardy in this climate, and there is little hope that another species able to support this climate will be found. The poverty of our gardens in these plants appears when the Arboretum collection is compared with that in a garden in Cornwall in England, in which some three hundred and sixty species of these plants are growing and in which on a day in May of this year sixty-five species were in flower. Such a collection, and perhaps even a better one, can be made in a garden in the neighborhood of Portland, Oregon, or in some favorable place on the shores of Puget Sound, but the sooner it is real-
ized that northeastern North America is not a good Rhododendron country in any broad sense the better it will be for the gardens in this part of the United States. For the last seventy years a large amount of thought, labor and money have been expended in attempts to cultivate these plants in the New England and Middle States; during this time many hundreds of thousands of these plants, principally hybrids of the American *R. catawbiense*, have been imported from Europe but the collections of Rhododendrons in the eastern states at all satisfactory or comprehensive can be counted on the fingers of one hand. In this climate unfortunately only a few of the Catawbiense hybrids, which are the popular Rhododendrons here, can be grown. The American parent of these hybrids is perfectly hardy, but the influence of the tender Himalayan species with which it has been crossed has made most of the varieties of this hybrid unsuited to this climate. The influence of the tender *R. ponticum*, the stock on which these plants have been almost universally grafted in European nurseries may account in part for the fact that plants of these hybrids which have lived here for thirty or forty years have then died without any other apparent cause. If evergreen Rhododendrons are ever to become hardy and permanent features of eastern gardens we must give up trying to make European-grown plants successful here, and confine our efforts to the few species which are hardy here and to crossing these among themselves in the hope of obtaining hybrids which will be able to grow here permanently. Something can perhaps be accomplished by the selection of seedlings. For example the flowers of *R. catawbiense* are of a peculiar shade of magenta which does not harmonize with any other color but white. Comparatively few seedlings, however, of *R. catawbiense* have ever been raised and probably not much attention has ever been paid to selecting from among the plants growing on the high Appalachian peaks individuals with flowers of unusual colors. *R. catawbiense* is perhaps the hardiest here of all Rhododendrons; the habit is excellent and the leaves are handsomer than those of the other hardy species. Improvement in the color of the flower is all that is needed to make it a first-rate plant for this climate. It is doubtful if this can be accomplished by crossing it with other species, but through patient selection it may be improved and possibly a white-flowered form discovered. Hybrid Rhododendrons are harder or less hardy than their parents. The few hybrids which have been made between *R. catawbiense* and *R. maximum*, the hardiest of all Rhododendrons here, are less hardy than their parents; and only a few of the hybrids of *R. catawbiense* with *R. arboreum* and other Himalayan species are hardy. On the other hand by crossing some of the Catawbiense hybrids with *R. Metternichii*, a delicate Japanese shrub, a race of hybrids has been produced in England which is quite hardy in the Arboretum; and the hybrids of the two species of the European Alps crossed with one of the forms of the American *R. minus* are excellent dwarf garden plants here. In this country the breeding of Rhododendrons for American gardens has never been systematically undertaken with full knowledge of the species available for the purpose. The field is an inviting one, for these plants and other hardy broad-leaved evergreens are greatly needed in American gardens.

**Chinese Lilacs.** Most of the Chinese Lilacs have the advantage of flowering later than the common Lilac (*Syringa vulgaris*). Several of
the species recently discovered in central and western China are now established in the Arboretum, and, flowering more freely as the plants grow older now begin to show their true value as garden plants in this climate. Perhaps the most distinct and certainly the most unusual of these Lilacs is *Syringa reflexa*. On this plant the flower-cluster is compact, cylindric, unbranched, from an inch to an inch and a quarter in diameter, long stalked and is gracefully arching and reflexed. The flowers are deep rose-color with a long slender corolla-tube, and have the disagreeable odor, although to a less degree than those of the Chinese *Syringa villosa* to which this species and the next are closely related, as is shown in their ample leaves dark green on the upper surface and somewhat pale, and slightly hairy on the lower surface. The other species in this group now in flower, *Syringa Sargentiana*, differs in its rather paler flowers white on the inner surface of the lobes of the corolla, and arranged in large, loose, long-branched, erect or spreading clusters sometimes eighteen inches long and twelve inches across. The leaves of this plant are hardly distinguishable from those of *S. reflexa*. Five of these new Lilacs belonging to the group of which *Syringa pubescens* may be taken as the type are flowering freely this year; they all have fragrant flowers, although less fragrant than those of *S. pubescens*, and slender corolla-tubes. *Syringa Koehneana*, which is probably a native of Korea, has broad leaves unusually large for a species in this group, and short, broad, compact clusters of flowers which are pale rose-color on the outside of the corolla-tubes and pure white on the inner surface of the corolla-lobes. On *Syringa yunnanensis* from southwestern China, which is a narrow shrub with erect stems and branches, the flowers are produced in narrow, branched, erect clusters and are white faintly tinged with rose and very fragrant. *Syringa tomentella*, of which *S. Wilsonii* is a synonym, is a larger and more vigorous plant with erect stems, dull green leaves, and open branched panicles of the palest rose-colored flowers with rather thicker corolla-tubes than those of the other species of this group. *Syringa microphylla*, so named for its small dark green leaves, is flowering this year more freely than it has in the Arboretum before; the flowers are small, with narrow corolla-tubes, and are pleasantly fragrant. Unlike other Lilacs, *S. microphylla* has in previous years flowered again in October. *S. Sweezeyi* is covered with flowers again this spring, as it has been now for several seasons. It is a tall shrub with dull green leaves and narrow clusters of fragrant flowers half an inch long, flesh-colored in the bud, becoming nearly white after the flowers open. This species blooms freely as a small plant, and is perhaps the most attractive of the new Lilacs with slender corolla-tubes, although it does not equal in beauty and fragrance *S. pubescens*, which has been an inhabitant of the Arboretum for a quarter of a century.

**Rosa sertata.** There is now flowering in the Shrub Collection a plant of the northern form of this Chinese Rose which at this writing is one of the most charming plants in the Arboretum. It is a bush three feet high with slender gracefully spreading and arching stems which form an open head six feet across. The leaves are now only about an inch long with seven minute leaflets. The flowers are solitary or rarely in pairs on the ends of short lateral branchlets crowded from end to end on the branches, and are rather less than three-quarters of an inch in diameter with light pure pink petals, and are slightly fragrant.
Scotch Roses. Some of the varieties of the Scotch Rose (*R. spinosissima*) are distinct and beautiful garden plants. The handsomest, perhaps, are the variety *altaica*, also sometimes called var. *grandiflora*, with petals faintly tinged with yellow toward their base, the varieties *hispida* and *lutea* with yellow flowers, and the variety *fulgens* with pale pink flowers. Like most single Rose-flowers, the flowers of these Scotch Roses last only a few days, but during these few days they are delightful additions to the Rose-garden; they all have stems covered with prickles, rather small leaves and comparatively large black shining fruits.

*Neillia sinensis* is blooming again this year. The flowers of this *Neillia* are cylindric, clear pale pink, nearly half an inch long, and hang down on slender stems in long, one-sided racemes terminal on short lateral branchlets, and do not open until the small dark green leaves have grown nearly to their full size. It is one of the new Chinese plants which seem destined to become popular in American gardens.

*Kolkwitzia amabilis*. The plant of this shrub in the collection of Chinese plants on Bussey Hill is now well worth a visit, for Kolkwitzia has not before flowered so abundantly in the Arboretum. It is the only representative of a genus which is related to *Diervilla* and *Abelia*. The flowers are borne in pairs on long stems at the ends of short lateral branchlets and are rose-color in the bud, becoming paler after opening, the inner surface of the three divisions of the lower lobe of the corolla being white blotched with orange color at the base. Kolkwitzia did not begin to flower until it had been several years in the Arboretum, and it has not always, especially in the Shrub Collection, proved perfectly hardy here. A plant, however, like the one now on Bussey Hill, will make up for many disappointments.

*Spirea Miyabei*. This Chinese shrub, although less beautiful than *S. Veitchii* and *S. Henryi*, which are the handsomest of the new Chinese plants in this genus, flowers earlier than they do and is distinct in its flat or slightly convex clusters of white flowers which are terminal on erect, leafy, lateral branchlets three or four inches long, and quite cover the plants.

*Viburnum Lentago*. There are probably several hundred Asiatic and other exotic trees and shrubs now blooming in the Arboretum but this week the Arboretum is indebted for its greatest beauty to none of these but to the Nannyberry, *Viburnum Lentago*, one of the commonest shrubs or small trees which grow naturally by the sides of Massachusetts roads and the borders of Massachusetts woodlands. The Nannyberry has been largely planted in the Arboretum and it has responded to generous treatment and good care, and there are now many large specimens in the mixed plantations, which are now covered with their broad convex clusters of nearly white flowers rising above the bright green leaves. These later will grow thick and become lustrous, and will turn deep wine-color in the autumn when the plants will bear great crops of dark blue-black fruits hanging gracefully in red-stemmed clusters. In habit, foliage, flowers and fruit no Viburnum is handsomer than this common native plant, and three-quarters or more of the exotic species cannot as ornamental plants be compared with it. Fortunately *Viburnum Lentago* can now be found in several American nurseries.