Deutzias. If all the species and hybrids of Deutzias are considered this genus is not a great success in this region where many of the plants are not hardy and others only flourish in exceptionally sheltered and favored positions. Much attention has been paid to hybridizing species of this genus, and probably the most useful Deutzia for this part of the world is a hybrid between the Japanese *D. gracilis* and the Chinese *D. parviflora*. *Deutzia gracilis* is a dwarf shrub with pure white flowers in erect or spreading racemes. This is an old and popular garden plant better worth growing in the southern and middle states, however, than it is in Massachusetts where the ends of the branches are often more or less killed. *D. parviflora* is a large, vigorous and hardy shrub with flowers in compact, many-flowered corymbs. It is a native of northern China and Mongolia. A hybrid between these two species was made by the French hybridizer Lemoine many years ago and has been called *D. Lemoinei*. It is a large shrub sometimes five or six feet high and broad which covers itself with large clusters of pure white flowers. Handsome and more compact varieties of this hybrid are the varieties *compacta*, *Boule de Neige*, *Avalanche* and *Candelabre*. Varieties of another of the Lemoine hybrids called *Deutzia rosea* sometimes flower well and promise to be good garden plants in sheltered positions. This hybrid was obtained by crossing *D. gracilis* and *D. purpurascens*; the latter has petals which are purple on the outer surface and is usually not hardy here. *D. rosea* and its varieties have flowers more or less tinged with purple. Another hybrid obtained by the same cross by Lemoine called *D. myriantha* has white flowers, and its varieties called *Boule Rose* and *Fleur de Pom-
miel are handsome and apparently hardy plants with flowers tinged with red.

Deutzia scabra, a native of Japan and China, is one of the hardiest and most generally cultivated of all Deutzias. It is a tall shrub with reddish branches, rough leaves and erect clusters of white flowers sometimes flushed with rose. This is the Deutzia of old gardens north and south. The variety crenata has brown branches and smoother leaves, and although less common in gardens appears to be equally hardy. The variety Watereri has flowers tinged with red on the outer surface of the petals. There is a variety plena with double flowers with petals tinged with rose color. The variety "Pride of Rochester" has flowers tinged with rose and is one of the handsomest of the group. Deutzia grandiflora is the first of the genus to flower here. Although known to botanists since 1832 it has only recently found its way into gardens through the agency of the Arboretum.

Philadelphus. Gardens owe much to this genus. In those of New England of more than a century ago it was one of the chief ornaments, and a few old-fashioned Roses, with the Syringa or Mock Orange (Philadelphus coronarius) were loved and carefully tended; in modern gardens there are few shrubs which produce more beautiful flowers than some of the Syringas. There are now established in the Arboretum some thirty species of Philadelphus and a large number of varieties and hybrids. All these plants, popularly called Syringas, are easy to propagate, demand no special care and suffer less from the attacks of insects than most trees and shrubs. They bloom freely every year, their flowers are often very fragrant, and in rich, well-drained soil the plants live for a long time. Some of the species can grow under the shade of overhanging trees, and flower in such situations more freely than almost any other shrub. The beauty of all these plants is found in their white flowers; the fruit, which is a dried capsule, has as little beauty as that of the Lilac, and there is nothing particularly distinct or interesting in the habit of the plants of any of the species; the leaves fall in the autumn without coloring. As flowering shrubs, however, not many surpass them in beauty, and their beauty is increased by the length of their flowering season which lasts in the Arboretum six weeks. The first Philadelphus to bloom here opened its flowers several week ago. It is a native of Korea and is named P. Schrenkii var. Jackii as it was discovered by Professor Jack during his travels in Korea. It is a tall narrow shrub with erect stems and flowers of medium size, and is of no exceptional value as an ornamental plant. Almost as early to flower is P. hirsutus from the southern Appalachian Mountain region of North America. This is one of the smallest flowered species, and in the Arboretum is a large loose-growing shrub of unattractive habit and of comparatively little value as a garden plant. It is to be regretted that the Syringa of old gardens (P. coronarius) has been pushed aside by newer introductions and has become comparatively rare in the gardens of this part of the country, for the flowers of no other Syringa have a more delicate and delightful fragrance. This plant, which is a native of southeastern Europe, reached England before the end of the sixteenth century, and was probably one of the
first shrubs which emigrants brought with them to this country. Among the American species which should find a place in all gardens are *P. inodorus*, *P. pubescens* and *P. microphyllus*. The first is a native of the Appalachian Mountain region and grows to a height of six feet; it has arching branches and large, pure white, cup-shaped, solitary, scentless flowers. By some persons it is considered the most beautiful when in bloom of the whole genus. *P. pubescens*, often called *P. grandiflorus* or *P. latifolius*, is also a plant of the southern Appalachian region. This sometimes grows to the height of twenty feet, with stout, erect branches, broad leaves and slightly fragrant flowers in erect five- to ten-flowered racemes. This plant is more common in gardens than the last, and when it is in bloom it makes a great show. *P. microphyllus*, which rarely grows more than three feet tall, has slender stems, and leaves and flowers smaller than those of any Philadelphus in cultivation. What the flowers lack in size, however, is made up in fragrance which is stronger than that of any other Syringa. The most distinct and handsomest of the Asiatic species in the Arboretum is *P. purpurascens*, discovered by Wilson in western China. This is a large shrub with long arching stems from which rise numerous branchlets from four to six inches long and spreading at right angles; on these branches the flowers are borne on drooping stems; they are an inch and a half long, with a bright purple calyx and pure white petals which do not spread as they do on most of the species but form a bell-shaped corolla and are extremely fragrant. This certainly must be numbered among the handsomest shrubs brought from western China by Wilson to the Arboretum.

*Philadelphus pekinensis* from northern China and Mongolia is a stout shrub rather broader than high which every year produces large quantities of small flowers tinged with yellow. Another interesting garden plant is *P. Falconeri* which is certainly Asiatic and probably Japanese; it has narrow lanceolate leaves and fragrant flowers in from one- to six-flowered racemes. The origin and history of this plant are not known. Some of the species hybridize freely, and several of the handsomest of the Syringas are hybrids. One of the first of these hybrids to attract attention was raised in France before 1870 by Monsieur A. Billard and is known as *P. insignis* and is sometimes called "Souvenir de Billard." It is one of the handsomest of the large growing Syringas, and the last or nearly the last to bloom in the Arboretum. The flowers will not be open for nearly another month. A hybrid probably between *P. grandiflorus* of the Appalachian Mountain Region with a species from our northwest coast appeared in the Arboretum a few years ago and has been called *P. splendens*. It is a large and vigorous shrub with unusually large flowers, and one of the handsomest of the Syringas in the collection. *P. maximus*, a supposed hybrid of *P. latifolius* from the southeastern United States and *P. tomentosus* from the Himalayas, grows to a larger size than any other of these plants. It is not rare in Massachusetts gardens in which plants from twenty to thirty feet high can occasionally be seen.

The crossing about thirty years ago by Lemoine of *P. coronarius* with *P. microphyllus* has produced an entirely new race of Syringas
which has proved to be one of the best additions to garden plants which has ever been made. The first plant obtained by this cross was called *P. Lemoinei*; it is a perfectly hardy shrub from four to six feet high and broad, with slender stems which bend under the weight of the countless flowers which are intermediate in size between those of the parents and retain the fragrance of those of *P. microphyllus*. There are at least a dozen distinct forms of this hybrid made by Lemoine, varying considerably in the size of the flowers and in the time of flowering. One of the handsomest of these plants, perhaps, is called *Candelabre*, which is a dwarf with flowers larger than those of either of its parents, an inch and a half wide, with petals notched on the margins and without the fragrance of its parents. Other distinct forms equally hardy and handsome are *Avalanche, Boule d'Argent, Bouquet Blanc, Erectus, Fantasie, Gerbe de Neige* and *Mont Blanc*.

**Neillia sinensis.** This is the only member of a genus of the Rose Family related to *Spiraea* which has flowered in the Arboretum. It is a native of western China where it was collected by Wilson and introduced into cultivation through the Arboretum. It is a tall hardy shrub with gracefully spreading and drooping branches, light green, incisely cut, pointed leaves from an inch and a half to two inches long, and clear pink flowers about half an inch in length, in short terminal racemes. It is one of the handsomest and most interesting of the hardy shrubs introduced by Wilson from western China.

**Rosa Marretii** is blooming remarkably this year. It is a tall, broad shrub with arching stems, pale green leaves and large pink flowers. It is a native of northern Hokkaido and of Sakhalin where it was discovered by the late Abbé Faurie who sent seeds to the Arboretum in 1908. This plant, which is still rare in cultivation, promises to be a good addition to the single-flowered Roses which can be successfully grown in this climate. One of the hardiest and best growing of the new Roses, *Rosa bella*, was raised at the Arboretum from seeds collected by Purdom in northern China, and is a plant which when better known will be popular. It is a large shrub with bright red flowers an inch and a half in diameter, and bright red fruit. It is with the other Chinese plants on Bussey Hill.

**Rosa multiflora cathayensis** is again covered with its great clusters of pink flowers and expanding flower-buds. The Chinese representative of the white-flowered *R. multiflora* of Japan, it is one of the most beautiful Roses and interesting as the wild type from which the Chinese derived the now well known Crimson Rambler Rose and another old-fashioned garden Rose, the Seven Sisters Rose (*R. multiflora platyphylla*).