Philadelphus. Gardens old and new owe much to this genus. In New England gardens of more than a century ago it was one of the chief ornaments and with the Lilac and a few old-fashioned Roses, the Syringa or Mock Orange (Philadelphus coronarius), was loved and carefully tended; and in our modern gardens there are few plants which produce more delightful flowers than some of the Syringas make in recent years by the art of the plant breeder. 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 manage, demand no special care, and suffer less from the attacks of insects than most trees and shrubs. They flower freely year after 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 these plants is found in their white flowers; the fruit, which is a dry capsule, has as little beauty as that of a Lilac; there is nothing distinct or particularly interesting in the habit of the plants of any of the species, and the leaves fall in autumn without brilliant coloring. As flowering plants not many shrubs, however, surpass them in beauty, and their value is increased by the length of the flowering season which extends in the Arboretum during fully six weeks. The first Philadelphus to flower in the Arboretum opened its flowers several days ago; it is from Korea (P. Schenkii var. Jackii), and 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. 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 at least this part of the country, for the flowers of no other Syringa have a more delicate and delightful perfume. This plant, which is a native of western Europe, reached England before the end of the sixteenth century, and was probably one of the first shrubs which the English 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 the height of six feet; it has arching branches and large, solitary, pure white, cup-shaped, scentless flowers. By some persons it is considered the most beautiful of all Syringas. \( P. \) pubescens, often called \( P. \) grandiflorus or \( P. \) latifolius, is also a plant of the southern Appalachian region. It often grows to the height of twenty feet; the branches are stout and erect, the leaves are broad, and the slightly fragrant flowers are arranged in erect, from 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 and perfumes the air for a long distance. The most distinct and the handsomest of the Asiatic species in the Arboretum is \( P. \) purpurascens, discovered by Wilson in western China. It 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 branchlets the flowers are borne on drooping stalks; 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 exceedingly fragrant. This is one of the handsomest of the shrubs brought from western China to the Arboretum. \( P. \) pekinensis from northern China and Mongolia is a stout bush rather broader than high which every year produces great quantities of small flowers tinged with yellow. Another interesting garden plant, \( P. \) Falconerii, which is certainly Asiatic and probably Japanese, has narrow lanceolate leaves and fragrant flowers in from one- to six-flowered racemes, and is distinct in the shape of its leaves and in its long narrow petals. The origin and history of this plant is not known. Some of the species hybridize freely and several of the handsomest of these plants are hybrids. One of the first of these hybrids to attract attention was raised in France before 1870 by Monsieur A. Billard; it is known as \( P. \) insignis and sometimes is 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, for the flowers will not be open for 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 named *P. splendens*; it is a large and vigorous shrub with unusually large flowers, and one of the handsomest Syringas in the collection. *Philadelphus maximus*, a supposed hybrid between *P. latifolius* from the southeastern United States, and *P. tomentosus* from the Himalayas, grows to a larger size than any of the other Syringas. It is not rare in old Massachusetts gardens in which plants from twenty to thirty feet high can occasionally be seen. The crossing about thirty years ago in France 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 shrubs that has ever been made. The first plant obtained by this cross is called *Philadelphus Lemoinei*; it is a perfectly hardy shrub four or five feet high and broad, with slender stems which bend from the weight of countless flowers; these are intermediate in size between those of the two parents and retain the fragrance of *P. microphyllus*. There are at least a dozen distinct forms of this hybrid made by Lemoine, varying considerably in the size of the plants and of the flowers, and in the time of flowering. One of the handsomest, perhaps, is called Candelabro; this is a very dwarf plant with flowers larger than those of either of its parents and an inch and a half wide, with petals notched on the margins, and without the perfume of its parents. Other distinct forms equally hardy and beautiful are Avalanche, Boule d'Argent, Bouquet Blanc, Erectus, Fantasie, Gerbe de Neige and Mont Blanc.

Some interesting Roses. The Boursault Rose (*Rosa Lheritierana*) has not before carried more flowers than it has borne this year. This Rose, which was raised in France early in the last century, is believed to be a hybrid of *R. chinensis* and the European *R. pendulina*, and owes its popular name to Monsieur Boursault who a hundred years ago had a garden in the Rue Blanche, now Chausée d'Antin, famous for its collection of Roses. There have been several forms of the Boursault Rose, the one in the Arboretum collection, which has pale rose red, partly double flowers, is not an uncommon plant in old New England gardens. It is a tall, vigorous and perfectly hardy shrub with gracefully spreading stems. *Rosa Marretii* has not before flowered so freely in the Arboretum; 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 Saghalien where it was discovered by the late Abbé Faurie who sent seeds to the Arboretum in 1908. This plant, which is probably still rare in cultivation, promises to be a good addition to the single-flowered Roses which can be successfully grown in this climate. The single-flowered Chinese form of *R. Roxburghii* (var. *normalis*) is flowering this week for the first time in the Arboretum and proves to have larger flowers than any other Rose in the collection, with the exception of *R. rugosa* and its varieties. The petals are pale shell pink and conspicuously notched at apex. The fruit of this Rose will probably be almost as ornamental as the flowers, as it is bright red, and thickly beset with long sharp prickles. One of the hardiest and best growing of the new Roses, *Rosa bella*, raised at the Arboretum from seeds collected by Purdom in northern China, 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 showy red fruit. The only plant in the collection is with the other Chinese Roses on Bussey Hill. Unfor-
fortunately the flowers were ruined as they opened by the excessive heat of last week. *Rosa multiflora cathayensis* is again covered with its great clusters of pink flowers and expanding flower-buds. The Chinese representatives of the white-flowered *R. multiflora* of Japan, it is one of the most beautiful Roses of its class, and interesting as the wild type from which the Chinese derived the now well known Crimson Rambler Rose and another old-fashioned garden plant, the Seven Sisters Rose (*Rosa multiflora platyphylla*). *Rosa Helenae*, which some persons consider the handsomest of the Roses discovered by Wilson in western China, will be in flower again in a few days. It is a large shrub with slender arching stems furnished sparingly with small red spines and many-flowered clusters of pure white delicately fragrant flowers an inch and a quarter in diameter. It well deserves a place in any collection of single-flowered Roses, however small.

**Rhododendron (Azalea) calendulaceum.** A lover of flowers who has had the good fortune to see the yellow-flowered Azalea in June on the wooded slopes of the southern Appalachian Mountains can never forget it. North America does not offer a more beautiful flower show. No other North American shrub has such brilliantly colored flowers; and no other Azalea hardy in New England can be compared with it in the variety of color found in its flowers. The flowers of the Korean Azalea *Schlippenbachii* are larger and more delicate in texture and color, and those of the Japanese *A. Kaempferi* are more surprising, for it is always a surprise to find the bright red flowers of this Azalea on a bare New England hillside. These plants when they are in flower look exotic here and do not fit our American surroundings as well as our yellow-flowered plant. The flowers, too, of the American plant remain in good condition longer than those of any of the Asiatic Azaleas, and they were not injured by the excessive heat of last week which spoiled the flowers of many other plants. A good many plants of *R. calendulaceum* have been raised at the Arboretum from seed, and many of the seedlings which are now blooming on Azalea Path show the variation in the color of the flowers from clear yellow to flame, which adds to the interest of a collection of these plants in early June. Single plants of this Azalea have also been planted among other shrubs on the borders of some of the drives, and these show how this Azalea can be used with advantage in New England plantations.

The Climbing Hydrangea (*Hydranga petiolaris*), which made last summer a large growth on the Administration Building, is as thickly covered with its broad flower clusters now as it has been in previous years. It is still the only climbing plant with conspicuous flowers able to attach itself firmly to a stone or brick wall, which can be grown in this climate. The fact that it is one of the first plants here to unfold its leaves adds to its value as a cover for the walls of buildings.

**Laurels (Kalmia latifolia).** When this number of the Bulletin reaches its Massachusetts readers the Laurels at the northern base of Hemlock Hill will be in bloom and never before have these plants been so thickly covered with flowers. They furnish the last and for many persons the most beautiful of the great Arboretum flower displays of the year.