Philadelphus. In 1811 English gardeners cultivated only two species of Philadelphus and twelve years later botanists recognized only eleven species. There are now established in the Arboretum some thirty species 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 many years. 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. 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 Philadelphus 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 fortnight. 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 during the past week has been one of the handsomest Syringas in the collection; the flowers are without perfume. *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* 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 slimmer 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 Candélabre; 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, Érectus, Fantasie, Gerbe de Neige and Mont Blanc. The Mock Orange of old gardens, *Philadelphus coronarius*, a native of southeastern Europe and the Caucasus, was cultivated in England in 1596 and was probably one of the first shrubs brought to America by the English settlers. It is a shapely hardy shrub able to bear a good deal of neglect and abuse, and chiefly valuable for the fragrance of the flowers which are smaller than those of many other species and faintly tinged with yellow. Several forms of this plant are in the collection. None of them, however, are of particular beauty or interest, and one of them with double solitary flowers is as ugly as it is possible for a Syringa to be. Among the species none is perhaps more interesting than the Rocky Mountain *P. microphyllus*, one of the parents of the Lemoine hybrids. It is a compact shrub three or four feet high and broad with leaves not more than half an inch long and smaller flowers than those of any other Philadelphus in cultivation and rather less than three-quarters of an inch in diameter; their fragrance is not surpassed by that of any plant in the collection. The most beautiful of the species of recent introduction, *P. purpureascens*, is a native of western China, where it was discovered by Wilson. It is a shrub with long arching branches, from which rise numerous branchlets spreading at broad angles and from four to six inches long; these bear the flowers on drooping stalks from near the base to the apex and give to the plant when it flowers a different appearance from that of any of the other species. The flowers have a strong pungent and delightful odor and are an inch and a half in diameter with a purple calyx and pure white petals which do not spread like those of many of the species but form a bell-shaped corolla. It is the handsomest of the Old World species, and an addition to garden plants of first importance. It is interesting that the handsomest of the American species, *P. indorus*, was one of the first Syringas cultivated in Europe where it arrived about the middle of the eighteenth
century. It is a large shrub with arching branches, and large, solitary, pure white, cup-shaped, scentless flowers. This beautiful plant is not now very often seen in gardens. It is impossible in this bulletin even to mention all the species, varieties and hybrids of Philadelphus in the collection which is now one of the most complete in the Arboretum. It will well repay a careful study by persons interested in handsome garden shrubs and in the effects of hybridization, natural or intended, in this genus.

A new Chinese Rose. From the seeds of a Rose collected by Wilson in western China a new species of the Moschata Group has been raised. It is now flowering in the Arboretum for the third year and is to be named Rosa Helenae; it is a vigorous and perfectly hardy shrub with slender, arching stems furnished sparingly with short red spines, and five or six feet high, light green cheerful foliage, and terminal and axillary many-flowered clusters of pure white, delicately fragrant flowers an inch and a half in diameter and borne on short erect branchlets. It is a plant which will be prized by persons realizing that among the wild Roses are some of the most beautiful of all flowering plants and who find a place for them in their gardens.

Magnolia macrophylla. This is the last of the Magnolias in the collection to flower. It is a medium-sized tree with wide-spreading branches, and is distinguished by the fact that of all trees which grow beyond the tropics it has the largest leaves and the largest flowers. The leaves are silvery white on the lower surface, from twenty to thirty inches long and from eight to nine inches wide, and the cup-shaped, creamy-white, fragrant flowers are often a foot in diameter. An inhabitant of the south where it is widely distributed from North Carolina to western Louisiana, this Magnolia is perfectly hardy in New England, but unless it is planted in sheltered positions the trees often become disfigured by the wind which tears the large delicate leaves.

Magnolia glauca. Less showy than Magnolia macrophylla, this is a more valuable plant for general cultivation. Often a large tree in the south, at the north Magnolia glauca is never more than a small tree, or more often a large shrub. The leaves are dark green and very lustrous on the upper surface and silvery white on the lower surface; the flowers are small, cup-shaped, creamy white and delightfully fragrant, and continue to open in succession from the middle of June until August. In all North America there is not a more delightful shrub to plant in the garden, or one that will give larger returns in beauty and fragrance; yet it is difficult to find it in any quantity in American nurseries, and it is unknown to most American planters of this generation. A hybrid, M. major, often called M. Thompsoniana, between M. glauca and M. tripetala, another American species, has the general appearance of M. glauca but has larger leaves and larger fragrant flowers. It is with the American Magnolias on the right-hand side of the Jamaica Plain Gate and is now in flower.

Hydrangea petiolaris. The so-called Climbing Hydrangea was introduced into the United States from Japan in 1876 by the Arboretum and is now often seen in Massachusetts gardens. It is usually allowed to climb up the trunks of trees, and it is perhaps not well known that this Hydrangea is an excellent plant for covering brick and stone walls,
to which it is able to attach itself firmly. Short lateral branchlets are developed from the stems; these bear the terminal flower-clusters which are thus brought out from the general surface of the vine and give to the covering of the wall a loose and attractive appearance. Such a plant can now be seen in flower on the Administration Building.

**Indigoferas.** *Indigofera Kirilowii* is flowering in the Shrub Collection and on Hickory Path near Centre Street. It is a low shrub which spreads rapidly into a broad mass, and produces during several weeks racemes of large pure pink flowers. Introduced a few years ago into the Arboretum by Mr. Jack who found it in Korea, it has proved one of the best plants of its class. Near it on Centre Street *Indigofera amblyantha* is also in flower. It is a plant of entirely different habit, with slender stems, small leaves, and axillary clusters of small rose-colored flowers which continue to appear during two or three months. This is one of the most beautiful of the small shrubs introduced by Wilson from western China where he found it growing on river cliffs in Hupeh at altitudes up to six thousand feet above the sea. Two other species of this genus are established on Azalea Path near its entrance from the Bussey Hill Road, *I. Gerardiana*, a native of the Himalayas, and *I. decorata* from southern China. These two plants, although they are killed back to the ground every winter, send up new stems and flower profusely every year. *I. decorata*, which is just in bloom, is a handsome plant with racemes of large white flowers.

**Late Bush Honeysuckles.** In the Shrub Collection two of the latest of these plants are in flower, and are beautiful now and will be still more beautiful later in the season when more of the fruit is ripe. They are *Lonicera Ledebourii* from the Pacific coast region and *L. involucrata*, var. *serotina* from the mountains of the interior of the continent. The long slender flowers of these plants are bright yellow more or less tinged with red and surrounded by large, leaflike, dark red cups which remain under the large, black, lustrous fruit. These plants remain in bloom for a long period, and flowers and ripe fruit can now be found on them. This group of Honeysuckles, of which there are several forms, contains some of the hardiest and most beautiful garden shrubs which have been brought into the Arboretum from western North America, a region which has produced few plants which are hardy in this climate.

**Two Andromeda-like Plants.** *Leucothoe Catesbaei* and *Lyonia mariana* are now in flower. The former is an evergreen with long, spreading and arching stems clothed with handsome long-pointed leaves, and small clusters of axillary white flowers; it is a native of the southern Appalachian region and one of the hardiest and most desirable of the broad-leaved evergreen shrubs which can be grown in this climate. It requires moist soil and a shady position. It can be seen in large numbers along the brook and in the small ravine at the base of Hemlock Hill. *Lyonia mariana* is a smaller shrub with deciduous leaves and white, racemose flowers borne on leafless shoots. This plant is common in the eastern states from Rhode Island southward, and when cultivated is not particular about soil or situation. There is a mass of these plants now in full bloom on the right-hand side of the Meadow Road in front of the Horsechestnut Group.