Philadelphus. Among the shrubs which give beauty to northern gardens in early summer Philadelphus, or as it is popularly called Syringa and Mock Orange, is perhaps only surpassed in interest and value by the Rose and the Laurel (Kalmia). It is only the abundant and often delightfully fragrant white flowers of the plants of this genus which are beautiful; for the fruit is a dry capsule; the habit of the plants is not different from that of many other shrubs, and their leaves fall in early autumn without having changed their color. The plants are natives of eastern and western North America, Japan, China, the Himalayas and southeastern Europe. In the Arboretum collection there are some thirty species, several distinct varieties of some of the species, and a large number of hybrids for in few genera of plants has the hybridizer been more successful in producing new and valuable forms. Plants in this group are in bloom in the Arboretum during fully six weeks, the earliest being a form of Philadelphus Schneckii named variety Jackii for Mr. J. G. Jack, who discovered it in Korea, which in ordinary seasons opens its flower-buds during the last week of May and the latest, or almost the latest, the hybrid P. insignis, which does not flower before the middle of July. Among the species which seem best worth a place in the garden is the European species P. coronarius, the Mock Orange of old gardens, which was cultivated in England before the end of the sixteenth century and was probably one of the first shrubs brought to America by the English. It is a large and hardy shrub and is chiefly valuable for the fragrance of its flowers which are faintly tinged with yellow. A number of seminal forms of this plant are cultivated, including one with yellow leaves, one with double flowers and one with narrow, willow-like leaves, but
none of them have any particular value or interest for the decoration of gardens.

Among the American species which should find a place in all collections of hardy shrubs are *P. inodorus*, *P. pubescens* and *P. microphyllus*. The first is a medium-sized plant with arching branches and large, solitary, pure white, cup-shaped, scentless flowers and by many persons considered the most beautiful of the whole genus. *P. pubescens*, sometimes called *P. latifolius* and *P. grandiflorus*, and known in gardens under various other names, is a native of the southern Appalachian region and a shrub sometimes twenty feet high with stout erect stems and branches, broad leaves, and large, slightly fragrant flowers arranged in erect, from five- to ten-flowered racemes. *P. microphyllus* is a Rocky Mountain species with leaves less than an inch long, and small, intensely fragrant flowers. This is a compact and hardy shrub, growing here in the Arboretum about three feet high and broad.

The most distinct and the handsomest of the Asiatic species which flowers here is *Philadelphus purpurascens*, discovered by Wilson in western China. It is a shrub with long arching stems from which rise numerous branchlets from four to six inches long and spreading at wide angles. On these branchlets the flowers are borne from base to apex 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. *Philadelphus Magdalenæ* from central China is another handsome plant well worth general cultivation. It is a broad tall shrub with arching stems, small, dark green, finely toothed leaves and pure white fragrant flowers an inch and a quarter in diameter and arranged in drooping, leafy, many-flowered panicles from six to ten inches in length. Few Syringas this year in the Arboretum have produced a larger number of flowers or have been more conspicuous objects of beauty. *Philadelphus 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 and is well worth a place in the garden. 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 its long narrow petals. This plant was sent to the Arboretum many years ago by the Parsons Nursery at Flushing, Long Island, but nothing more is known of its origin or history.

By crossing *P. coronarius* with *P. microphyllus* the French hybridizer Lemoine obtained many years ago a new race to which the name *Philadelphus Lemoinei* was given. The type of this race is a perfectly hardy shrub four or five feet high and broad, with slender stems which are now bent down by the weight of innumerable flowers. These are intermediate in size between those of the two parents and retain the strong perfume of the flowers of the Rocky Mountain plant. A number of forms of this hybrid, varying in the size and habit of the plant and in the size and shape of the flowers, were produced by Lemoine, and they are all good plants of great beauty and interest. Indeed this
group must be considered one of the great contributions made by man to gardens in the last fifty years. Lemoine produced other hybrids like Conquête, Nuée Blanche, Rosea and Perle Blanche of rather uncertain origin. They are all interesting but perhaps less beautiful than some of the forms of P. Lemoinei.

A hybrid probably between Philadelphus grandiflorus from the Appalachian region and one of the western species appeared in the Arboretum a few years ago and has been named P. splendens. It is a large shrub with erect stems and large scentless flowers, and is one of the handsomest Syringas in the Arboretum collection. Another hybrid, supposed to be between P. pubescens (P. latifolius) of the southeastern United States and the Himalayan P. tomentosus, grows to a larger size than other Syringas. Plants from twenty to thirty feet high of this hybrid can sometimes be seen in old Massachusetts gardens. It is impossible to name all the different species, varieties and hybrids of this genus now growing in the collection in one of these Bulletins, and persons interested in flowering shrubs will do well to visit the collection at this time and see the plants themselves. Many of them are in the general Shrub Collection but a larger number is in the special Philadelphus collection on the right-hand side of Bussey Hill opposite the Lilacs.

Late Rhododendrons. Two dwarf hybrid Rhododendrons are now in flower and deserve consideration as rock garden plants. The first, R. arbutifolium, is a dense shrub spreading into broad masses of branches occasionally four feet high, small, acute, evergreen leaves, and small rose-purple flowers in small compact clusters. It is considered to be a hybrid between R. ferrugineum of the European Alps and R. minus (R. punctatum) of the southern Appalachian region. R. arbutifolium is better known in gardens as R. Wilsonii, a name which belongs to a hybrid between two Himalayan Rhododendrons. It is sometimes also cultivated under the names of R. daphnoides, R. Hammondii, and R. oleaeifolium. The second of these plants, R. myrtifolium, is believed to be a hybrid between the other European alpine species, R. hirsutum and R. minus. It is a smaller and more upright growing plant than R. arbutifolium and has smaller and broader leaves and much handsomer rose-pink flowers also in compact clusters. It is not usually quite so hardy as R. myrtifolium but was uninjured last winter, and the plants are now covered with flowers.

Periploca sepium. To most gardeners who live where the climate is less severe than it is in eastern Massachusetts Periploca graeca, a tall, vigorous, climbing plant with dark green leaves and curious green and brown flowers, is familiar. Less known is the species from northern China, P. sepium, which has more slender stems which do not climb so high, lanceolate, green and very lustrous leaves and flowers similar to those of P. graeca but only about three-quarters of an inch in diameter. It is perfectly hardy here and can now be seen covered with flowers on one of the trellises between the Shrub Collection and the parkway. It produces many suckers from the roots and there is therefore no reason why this beautiful plant should remain so little known in gardens.
Cytisus scoparius, var. Andreanus compactus. This is a dwarf form of a variety of the Scotch Broom (var. Andreanus) which differs from the ordinary form of the Broom in the dark crimson wing petals of the flowers. In the Arboretum this dwarf plant with nearly prostrate stems rising only a few inches above the surface of the ground is perfectly hardy, which cannot be said of any of the other varieties of Cytisus scoparius which have been tried here, and is now covered with its large and brilliant flowers which make a bright spot in the Shrub Collection and on Hemlock Path near Centre Street.

Late-flowering Viburnums. The Arboretum in early summer owes much to some of the late-flowering Viburnums which have been largely planted here. Among these are three of the blue-fruited American species and the red-fruited Japanese V. dilatatum. Of the American species V. cassinoides has been in flower during the last two weeks and on many of the plants the flowers have already faded. A native of swamps in the northeastern part of the country, where it sometimes makes slender straggling stems fifteen or twenty feet high, this Viburnum grows well on drier ground and in cultivation is a round-topped and compact shrub. The leaves are thick, lustrous and finely toothed, and vary greatly in size and shape, and the flowers, which are slightly tinged with yellow, are arranged in concave clusters which vary in size on different plants. The fruit is larger than that of the other American summer-flowering Viburnums, and is even handsomer than the flowers. When fully grown it is first yellow-green, later becoming pink and finally blue-black, fruits of the three colors occurring in early autumn in the same cluster. This is one of the handsomest of all the Viburnums which can be successfully cultivated in this climate. The other American late-flowering species are closely related and have more coarsely-toothed leaves, wide flat clusters of white flowers and small blue fruits. The earliest to bloom, V. dentatum, is already dropping its flowers. It is a common roadside and meadow shrub in the eastern parts of the country and, like many of our native shrubs, is greatly improved by good cultivation. As its flowers fade those of V. venosum begin to open. In habit and general appearance this resembles V. dentatum, but the young branches and the lower surface of the leaves are thickly covered with a coat of pale hairs. This Viburnum grows only in the neighborhood of the coast from the southern shores of Cape Cod to New Jersey. Viburnum Canbyi, the last of all the Viburnums to flower in the Arboretum, resembles V. venosum but flowers two or three weeks later, and the flower-clusters and fruits are larger. It is a native of eastern Pennsylvania, northern Delaware and central Indiana. This Viburnum has grown to a large size in the Arboretum and specimens ten or twelve feet high and broad can be seen near the Administration Building and along the Meadow Road. V. dilatatum has been covered with flowers this year and is a broad, shapely and vigorous shrub with very dark green leaves and wide flat clusters of pure white flowers followed late in the autumn by small bright red fruits which often remain on the plants until late in the winter.