Philadelphus. Among the shrubs which give beauty to northern gardens in early summer Philadelphus, or as it is popularly called Syringa or 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 season 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 nar-
row, 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 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 shrub, about three feet high and broad, but unfortunately not always hardy here.

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 Magdalenae* 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. *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 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. 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.

In few genera of garden shrubs have natural cross fertilization and the art of the plant-breeder produced greater results than in *Philadelphus*. The first of these hybrids to attract attention was raised in France before 1870 by a Monsieur Billard and is sometimes called "Souvenir de Billard," although the correct name for it is *Philadelphus insignis*. This hybrid is one of the handsomest of the tall-growing *Syringa*; it has large, snow-white flowers in long clusters, and its value is increased by the fact that it is the last of the whole group to flower. The largest *Syringa* in our northern gardens, where plants thirty feet high and correspondingly broad are sometimes found, appears to be a hybrid between *P. coronarius* and some unrecognized species. To this plant, whose history is unknown, the name of *Philadelphus maximus* has been given. Another hybrid called *Philadelphus splendens* appeared
in the Arboretum several years ago and is supposed to be a hybrid be-
tween two American species, P. inodorus and P. pubescens. It is a
large and shapely shrub with pure white, only slightly fragrant flowers
an inch and three-quarters in diameter and borne in erect clusters.
This hybrid is a free-flowering plant and when the flowers are open it
is the showiest plant in the Syringa Group.

These early hybrids are the result of natural cross fertilization, and
the systematic breeding in the genus dates from the time when Lemoine
first crossed the Rocky Mountain P. microphyllus with P. coronarius
and produced a plant to which he gave the name of P. Lemoinei.
Lemoine then crossed his P. Lemoinei with P. insignis and produced a
race to which the general name of P. polyanthus has now been given.
Well known forms of this plant are “Gerbe de Neige” and “Parvillon
Blanc.” To another race of the Lemoine hybrids the name of Phila-
delphus cymosus has been given. This race was obtained by crossing
P. Lemoinei and P. pubescens or some related species. “Conquête”
is considered the type of this group. Other well known plants which
are thought to belong here are “Mer de Glace,” “Norma,” “Nuée
Blanche,” “Rosace,” “Voie Lactée,” and “Perle Blanche.” Another
race of hybrids with double racemose flowers raised by Lemoine and of
doubtful origin is called P. virginalis. The type of this group is Le-
moine’s “Virginal.” Other plants referred to it are “Argentia,”
“Glacier,” and “Bouquet Blanc.”

Tree Lilacs. As the flowers of the late-flowering group of the true
Lilacs fade the earliest flowers of the so-called Tree Lilacs begin to
open. There are three of these Lilacs which all bear large clusters of
white or yellowish white flowers with a corolla shorter than the sta-
mens, while in other Lilacs the corolla is longer than the stamens which
are hidden in its throat. The flowers of the Tree Lilacs are white and
all have the disagreeable odor of the flowers of the Privet; the leaves
fall in the autumn without change of color. The first of these plants
to flower, Syringa amurensis, a native of eastern Siberia as its name
implies, is a shrub in habit, twelve or fifteen feet high with dark close
bark, broad thick leaves dark green above and pale below, and short,
broad unsymmetrical flower-clusters. S. pekinensis from northern
China flowers next. This is also shrubby in habit, sometimes twenty
or thirty feet tall and broad, with stout, spreading stems covered with
yellow-brown bark separating readily into thin plates like some of the
Birch-trees, dark green, narrow, pointed leaves and short and unsym-
metrical flower-clusters usually in pairs at the ends of the branches.
This species holds its leaves later in the autumn than the others, and
produces great quantities of flowers every year, the other species usu-
ally flowering abundantly only every other year. The last of the Tree
Lilacs to flower, S. japonica, is a native of northern Japan, and is
really a tree sometimes forty feet high with a tall straight trunk cov-
ered with lustrous brown bark like the bark of a Cherry-tree, a round-
topped head of upright branches, broad, thick, dark green leaves, and
erect, mostly symmetrical flower-clusters from twelve to eighteen inches
long. This is one of the handsomest of the small trees which bloom
here at the end of June or early in July. The first flowers of S. japa-
onica are now opening; they promise to be in good condition until after
the first of July. The first Lilac flower, that of *Syringa hyacinthiflora*, opened here this year on the second of May. The season of Lilac flowers therefore extends here during fully two months. Fifty years ago when the Arboretum was begun the people of Massachusetts were able to enjoy the bloom of Lilacs only during a week or ten days.

**Late Flowering Hawthorns.** Different species of Hawthorn have been flowering continuously in the Arboretum since the early days of May and the last of these are now in flower. One of the last, *C. tomentosa*, the type of the Macracanthae or as it has often been called the Tomentosae group and one of the species known to Linnaeus, is a small tree widely distributed from the valley of the Hudson River westward and southward, with large pointed leaves, small flowers in compact clusters, and small oblong red fruit, translucent when fully ripe. As an ornamental plant this species is much less attractive than many of the other plants in this group. The Washington Thorn, so-called, *Crataegus Phaenopyrum*, probably still better known as *C. cordata*, is now in flower. It is a slender tree growing under favorable conditions to a height of from twenty-five to thirty feet. The dull green leaves are nearly triangular in shape, not more than two inches long and an inch and a half wide and in the autumn turn bright scarlet. The flowers are creamy white, smaller than those of most Hawthorns, and are arranged in small compact clusters. Few if any of the American species have less attractive flowers. The fruit, too, is small, barely more than a quarter of an inch in diameter; and the Washington Thorn owes its value as a garden plant to the brilliancy of its autumn foliage and to the beauty of its abundant fruits long persistent on the branches. A century ago *Crataegus Phaenopyrum* was much used as a hedge plant in the middle states, although there are many other American Hawthorns which are better suited to form handsome and impassable hedges.

It has generally been supposed at the Arboretum that *C. Phaenopyrum* was the last Hawthorn to flower here, but this year *C. Chaymannii* has flowered a few days later. This is a native of river banks in the southern Appalachian Mountain region and in southern Missouri and is another member of the Macracantheae group. It is a larger and handsomer tree than *C. tomentosa* with shorter obtuse obovate leaves, flowers with only from five to ten stamens, and globose fruit.