Tree Lilacs. This name is often given to three large-growing Lilacs of northeastern Asia which are now in flower and are conspicuous objects in the Arboretum. These plants all have white flowers in large clusters, and differ from other Lilacs in the shape of their flowers. In all other Lilacs the tube of the corolla is much longer than the calyx and longer than the stamens which are enclosed by it, while in the Tree Lilacs the tube of the corolla is not much longer than the calyx and shorter than the stamens which are therefore seen when the flowers open. On account of this difference in their flowers the Tree Lilacs have been thought by some botanists to belong to a different genus to which the name Ligustrina was given, and this is now the name of the section of the genus Syringa in which they are placed. The three species are much alike and only differ in the shape of the leaves, in the size of the flower-clusters and in the time of flowering. They lose their leaves early in the autumn without any change of color, and in this early shedding of their leaves is found their only drawback as garden plants for they are all hardy, grow rapidly, are good in habit and bloom freely, although the flowers of one of the species, Syringa japonica, are usually produced more abundantly in alternate years. The first of these plants to bloom, S. amurensis, is a native of eastern Siberia and northern China, and is a small, bushy, rather flat-topped tree which in cultivation rarely exceeds twenty feet in height. The leaves are thick, dark green, long-pointed, from three to four inches long and from two and a half to three inches wide, and the spreading and slightly drooping flower-clusters are usually from twelve to fourteen inches long and broad. This plant was first raised in this country before 1870 in the Harvard Botanic Garden from seeds received from the Botanic Garden at St. Peters-
It appears to be less commonly cultivated than the other Tree Lilacs. Judging by the climate of the region where it grows naturally, it will probably prove one of the best shrubs or small trees for the northern interior region of Canada and for the northern states of the Mississippi valley. *S. pekinensis* is usually the next of the three Tree Lilacs to bloom, although this year it is beginning to flower rather later than *S. japonica*. It is a native of northern China and is a shrub rather than a tree, although it sometimes grows in this country thirty feet high, with numerous stout, spreading stems distinctly drooping at the ends and covered with light yellowish brown bark separating into thin layers like that of some of the Birch-trees. The leaves are narrower than those of the other species, long-pointed, drooping on long stalks, and usually about three inches long and from half an inch to an inch wide. The flower-clusters, which are produced every year in immense numbers, are smaller than those of the other Tree Lilacs and are flat, very unsymmetrical, partly drooping and about five or six inches long and broad. This fine plant has been growing in the Arboretum since 1883 when it was raised from seeds sent here from Peking by the late Dr. Bretschneider. *S. pekinensis* has been somewhat distributed by American nurserymen and there are now large specimens in several Massachusetts gardens. The last of the three Tree Lilacs, *S. japonica*, is a native of the forests of northern Japan and a tree sometimes forty feet high with a tall stem sometimes a foot or more in diameter and covered with lustrous reddish brown bark like that of a Cherry-tree, and comparatively small, spreading and ascending branches which form a rather narrow round-topped head. The leaves are dark green, lustrous, four or five inches long and about two and a half inches wide, and the flower-clusters, which are erect and more symmetrical than those of the other Tree Lilacs, are from twelve to eighteen inches long and from twelve to fourteen inches wide. This tree was first cultivated in the Arboretum from seeds sent here from Sapporo in Hokkaido in 1876 by Mr. W. S. Clark, the first president of the Agricultural College at Sapporo. The seedlings grow rapidly and in 1886 were fifteen or sixteen feet high. The Tree Lilacs are growing on the bank on the left-hand side of the Bussey Hill Road in the Lilac Collection, and one of the original seedlings of *S. japonica* which was planted in what was once a nursery can be seen on the left-hand side of the Forest Hills Road in front of the Crabapple Collection. This is the year for the abundant bloom of the Japanese species and the plants are covered with flower-clusters.

*Salvia officinalis.* This little aromatic shrub is now in bloom in the Shrub Collection. The flowers are bright purple, showy, about three-quarters of an inch long, and are arranged in erect, terminal, compound racemes six inches in length. This plant is a native of southern Europe and has been cultivated in Europe for centuries for medicinal and culinary purposes, and formerly was much used in making "sage tea." Although rarely seen outside of the kitchen garden, it is well worth a place as a flowering plant in a collection of dwarf shrubs.

*Thymus Serphyllum.* This is another fragrant plant of the same family as the Salvia, and is growing near it in the Shrub Collection where it forms a broad mat of light green leaves only a few inches high. In a few days this will be covered with innumerable small lilac-colored flowers. The "Mother of Thyme," as this plant is sometimes
called, is an old inhabitant of gardens and is a useful rock garden plant. The fragrant leaves are sometimes used like those of the common Thyme in cooking.

**Philadelphus purpurascens.** This Chinese species is now covered with flowers. It is a large, vigorous shrub with long arching branches from which numerous branchlets spread at broad angles and are from four to six inches long; on these are borne on drooping stems the flowers which have a strong pungent and delightful odor, and are about an inch and a half in diameter with a light purple calyx and pure white petals which do not spread like those of many of the species but form a bell-shaped corolla. This is one of the most distinct and beautiful of all the Old World species, and one of Wilson’s important introductions from western China. It can best be seen in the Philadelphus Group on the Bussey Hill Road opposite the Lilacs.

**Philadelphus inodorus.** This native of the southern Appalachian foothill region, although the flowers are without fragrance, is for many persons the most beautiful plant of the genus. It is one of the medium-sized species with gracefully arching stems and pure white, cup-shaped flowers from an inch and a half to two inches in diameter. It is not often seen in gardens, although it was one of the first species of Philadelphus cultivated in Europe where it was first seen about the middle of the eighteenth century. The plants in the Shrub Collection and in the Bussey Hill Group are now covered with flowers.

**A double-flowered Philadelphus.** A Philadelphus raised by Lemoine and called by him Argentina is flowering for the first time on Bussey Hill Road. It is still a small shrub with erect, rather rigid stems now covered with large semi-double flowers which look like small white roses. More curious than beautiful, this addition to summer-flowering garden shrubs will perhaps be valued by persons who admire floral monstrosities.

**Aesculus Harbisonii.** This interesting plant which unfolds its leaves later than any other in this group and, with the exception of *A. parvifolia*, is the last to flower, is now blooming near the other dwarf Buckeyes. Two individuals of this peculiar plant appeared here in 1905 among a number of seedlings of *A. georgiana* and are believed to be hybrids of that species and the red-flowered variety of *A. discolor*, the two species growing together where the seed was gathered near Stone Mountain in central Georgia. The leaves of this hybrid are lighter green than those of either of its supposed parents; the flowers are borne on stout red stems in broad red panicles and are about three-quarters of an inch in length with a rose-colored calyx and canary yellow petals tinged with red toward the margins. The hybrid origin of these plants is shown by the fact that glands and hairs are mixed together on the margins of the petals, hairs only being found on the margins of the petals of plants of the group of Aesculus to which *A. georgiana* belongs and only glands on those of the plants of the group to which *A. discolor* belongs, so that when both hairs and glands are found on the margins of the petals of one of the Buckeyes it is good evidence that the plants are of hybrid origin.

**Cornus racemosa.** This northern Cornel has been largely used in the Arboretum in roadside plantations and is now conspicuous as the
plants are covered with their small clusters of creamy white flowers. These later in the season will be followed by white, translucent fruits borne on bright red stalks. This Cornel blooms here with some of the native Roses and their pink flowers compose perfectly with the white flowers of the Cornel; and when these plants are used together, as along some of the Arboretum roads, delightful effects are obtained.

June-flowering Hydrangeas. For a quarter of a century *Hydrangea Bretschneideri*, a native of northern China, has been a favorite plant in the Arboretum. It is a large and vigorous shrub with dark green leaves and flat heads of fertile flowers surrounded, as in other species of Hydrangea, by a ring of pure white ray flowers. The largest plant of this Hydrangea in the Arboretum is at Mr. Dawson's house on Centre Street. Several of the Hydrangeas introduced by Wilson from western China are now in flower in the collection of Chinese Shrubs on Bussey Hill and for the first time show their real value as garden plants in this climate. The tallest and most vigorous of these plants is *Hydrangea Rosthornii*, which is already eight feet high, with flower-clusters eight inches across. *H. xanthoneura* is closely related to *H. Bretschneideri* and can only be distinguished from it by a slight variation in the shape of the leaves, and by the almost entire absence of hairs from their lower surface. The plants are now covered with flower-clusters which are about eight inches across. Two forms of this Hydrangea, var. *Wilsonii* and var. *setchuenensis* are also in bloom, and as garden plants are as valuable as the species itself.

*Hydrangea petiolaris*. There are now few handsomer plants in the Arboretum than the specimen of this climbing Hydrangea on the Administration Building, although the long-stalked white ray flowers which surround the clusters of fertile flowers are beginning to fall. There are about a hundred of the flower-clusters on the plant and many of them are eight or nine inches across and terminal on short lateral branchlets which stand out from the body of the plant and give it an irregular surface which adds to its beauty. This Hydrangea is certainly the best deciduous-leaved climbing plant which can be grown against brick or stone walls in this climate.

*Potentilla fruticosa Veitchii*. This white-flowered form of the widely distributed yellow-flowered Cinquefoil is an excellent garden plant in this climate. It is dwarf in habit, blooms freely every year, and the plants are covered with flowers during several weeks. It can be seen in the general Shrub Collection and with the other Chinese shrubs on Bussey Hill.

*Potentilla tridentata* is an excellent little rock garden shrub not often seen in cultivation. It is a native of eastern North America where, especially on the coast, it is common in rocky and exposed situations. The leaves are composed of three leaflets which are dark green and very lustrous, and the small white flowers are produced in several flowered-clusters standing well up above the plant on long stems. This is well established in the general Shrub Collection where it is now flowering.

*Lonicera saccata*. By an unfortunate error "*Lonicera pileata*" was printed on page 35 of the last of these Bulletins instead of *Lonicera saccata*, the plant which was there described.