Summer-flowering American Viburnums. For many flowers the Arboretum is indebted in early summer to four American species of Viburnum which have been used in large numbers in its borders and roadside plantations. The earliest of these, *V. dentatum*, is already in bloom; it has handsome dark green leaves conspicuously toothed on the margins, and broad flat clusters of white flowers which are followed in early autumn by bright blue fruits on erect stems. This is a common roadside and meadow shrub in the northeastern part of the country. The second of these four Viburnums, *V. cassinoides*, is also in bloom. It is a native of swamps in the northeastern part of the country where it sometimes grows twenty feet high with slender straggling stems. In cultivation it forms a broad, low, round-topped bush, and has proved one of the handsomest of all the Viburnums introduced into the Arboretum. The leaves are thick and lustrous and vary greatly in size and shape. The flowers are slightly tinged with yellow and are borne in wide slightly convex clusters which also vary greatly in size. The fruit is larger than that of the other summer-flowering American species, and at first yellow-green later becomes pink, and finally blue-black and covered with a pale bloom, fruit of the three colors occurring in early autumn in the same cluster. In the Viburnum Collection, near the junction of the Bussey Hill and the Valley Roads, there are a number of plants of this Viburnum selected to show the variation in the shape of the leaves and in the size of the flower-clusters. The third of these summer flowering Viburnums, *V. venosum*, resembles in its general appearance *V. dentatum* but it flowers two weeks later, and the young branchlets and the lower surface of the leaves are thickly covered with a coat of stellate hairs. This Viburnum is found growing naturally only in the neighborhood of the
coast from Cape Cod and Nantucket to New Jersey. A larger and a handsomer plant with larger leaves, more showy flowers and larger, later-ripening fruit, *V. Canbyi* is the fourth of these species. It is a native of eastern Pennsylvania and northern Delaware where it is not common, and of central Indiana; and it is the last of all the Viburnums in the Arboretum to flower. There are large specimens of this plant in front of the Administration Building and at other points on the Meadow Road. All these Viburnums can be improved by cultivation and with generous treatment grow into larger and handsomer bushes than the wild plants, and bear larger leaves and better flowers and fruit. Few shrubs better deserve a place in American parks and gardens where they are still less often seen than they should be. Two rare American Viburnums can now be seen in flower in the Arboretum, *V. mollis*, a native of southern Kentucky and southern Missouri, with which *V. venosum* was once confused, and *V. bracteatum* which is known to grow naturally only on the cliffs of the Coosa River near Rome, Georgia. One of the few plants in cultivation is on Hickory Path near Centre Street. *V. mollis* is in the general Viburnum Collection.

**Red-fruited Viburnums.** With the exception of the species which belong to the Opulus Group no American Viburnums have red fruit, but in eastern Asia there are several red-fruited species. The handsomest of these in the Arboretum is *V. dilatatum*, which is a native of Japan, Korea, and western China. It is a large, shapely and vigorous shrub with broad, abruptly pointed leaves and wide flat clusters of flowers which are followed by small bright red fruits. This is a good shrub for the decoration of summer and autumn gardens. It is in the general Viburnum Collection, and there are good plants on the right-hand side of the Bussey Hill Road opposite the upper end of the Lilac Group. The fruit is smaller and less showy than that of another red-fruited Japanese species, *V. Wrightii*. This is a smaller shrub and flowered some time ago. The flower-clusters are smaller than those of *V. dilatatum* and the plants are not always perfectly hardy in exposed situations, but the fruit is larger and handsomer than that of the other red-fruited Viburnums of eastern Asia. Another of these plants, *V. theiferum*, from western China is not yet in flower. It is a tall, narrow shrub with erect stems, small leaves and small flower-clusters. It has little to recommend it as a flowering plant but the fruit is large, abundant and of good color, and the plant has an economic interest as an infusion of the leaves is the “sweet tea” used by the monks of the monasteries on Mt. Omei, one of the five sacred mountains of China.

**Magnolia glauca** in the Magnolia Collection, on the right-hand side of the Jamaica Plain entrance, is covered again with flowers. Although it has often been insisted on in these bulletins, the fact that this is one of the handsomest plants which can be grown in our gardens cannot be too often repeated. Often a large tree in the southern states, at the north *M. glauca* never grows to any great size and is more often a large shrub than a tree. The leaves are dark green and very lustrous on the upper surface and silvery white on the lower surface. In the south they remain on the branches until spring; here they retain their brilliancy and do not fall until December. The flowers are
small, cup-shapes, and during many weeks fill the air, especially in the evening, with a delightful fragrance. There is no plant which will give here at the north a greater return in beauty and fragrance, yet it is impossible to find this Magnolia in any quantity in American nurseries, and it is still unknown to most American planters of this generation.

Lonicera pileata. To persons who admire plants which produce beautiful fruits this little Chinese Honeysuckle will be a delight. It is a shrub which does not grow more than two or three feet high. The leaves vary from one to two inches in length; on the upper surface they are dark yellowish green and lustrous, and are silvery white on the lower surface. The flowers are pale yellow, about a third of an inch long and are not conspicuous, and the great beauty of this plant is in the fruit. This is half an inch broad, square at the ends, somewhat compressed, wider than high, bright scarlet and translucent. It hangs down from the lateral branchlets on slender stalks two-thirds of an inch in length. The earliest fruit ripened several days ago, but as that which develops from the axils of leaves higher on the branchlet ripens later the plant is conspicuous for its fruit for a long time. L. pileata is a common woodland shrub in central and western China where it was discovered by Dr. Augustine Henry. It was introduced into gardens by Wilson and first flowered in the Arboretum in 1913. It can now be seen on the southern slope of Bussey Hill with the other new Chinese Honeysuckles in the collection of Chinese shrubs.

Styrax japonicus. Although at least one hundred species of Styrax are now recognized, with four species in the southern United States and one in California, only two Japanese species up to the present time have proved really hardy in the Arboretum. The more satisfactory of these two species, S. japonicus, is a large shrub which is covered every year at this time with white bell-shaped flowers which hang down from the branches on long slender stems. The globose, drupelike dry fruits are not particularly ornamental, and the leaves fall late in the autumn without change of color. There is a group of large plants of this Styrax on Hickory Path, near Centre Street, and that it is perfectly at home there is shown by the innumerable seedlings which every spring come up under the plants. The other Japanese species, S. obassi, is a small tree with larger leaves than those of S. japonicus, and flowers in long drooping clusters; it can be seen on the upper side of Azalea Path where it is quite hardy but does not flower.

Cotinus. In the Sumach Group, on the left-hand side of the Valley Road and opposite the Euonymus Group, the Smoke-tree (Cotinus coggygria) is in bloom. The flowers are very small, in loosely arranged clusters and are not at all conspicuous; and it is their much lengthened hairy colored stems which are interesting and showy, and make this plant such a feature of the summer garden. The fruit is small and of no particular beauty, but in the autumn the dark green leaves sometimes assume dull shades of red and orange. The Smoke-tree is a native of southern and southeastern Europe, the Himalaya and western China, and is perfectly hardy in New England where it was probably brought early from Old England where it was cultivated soon after the middle of the seventeenth century. In the same group there is a large specimen of the American species, C. americanus. This as
it grows in the south is sometimes a tree thirty feet tall with a stout trunk a foot in diameter, but here in the Arboretum it is always bush-like in habit. The leaves are often six inches long and four inches wide, of a cheerful light and yellow-green color, and in the autumn they turn to most brilliant shades of orange and scarlet. In this autumn color is found the chief ornamental value of this plant, for the lengthening stalks of the flowers makes little show in comparison with those of the European plant. *Cotinus americanus* grows only in a few isolated stations in the southern states from northern Alabama to southern Missouri, Oklahoma and eastern Texas, and has been considered a comparatively rare plant, but this year Mr. E. J. Palmer has found it as a small shrub covering thousands of acres in the rocky caños and on the steep hillsides near Spanish Pass in Kendall County, Texas.

**Philadelphus.** Few genera of hardy shrubs give as much beauty to summer gardens as *Philadelphus* or, as it is popularly called, Mock Orange or Syringa, and to few genera of cultivated plants have so many important additions been made in recent years. As early as 1811 English gardeners cultivated only two species, and twelve years later only eleven species were recognized by botanists. Now there are established in the Arboretum some thirty species and a large number of varieties and hybrids. 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 particularly interesting in the habit of any of the plants, and the leaves fall early in the autumn without change of color. As flowering plants, however, not many shrubs surpass them in beauty, and the importance of the group is increased by the length of the flowering season which in the Arboretum extends through six weeks. Philadelphus has gained most by the art of the hybridizer, although the handsomest, perhaps, of the Old World species, *P. purpurascens*, is of recent introduction, having been discovered only a few years ago by Wilson in China. The first of the hybrids to attract attention was raised in France before 1870 by Monsieur Billard and is sometimes called Souvenir de Billard, although the oldest and correct name for this plant is *P. insignis*. This is one of the most beautiful of the large-growing Syringas and one of the last of the whole group to flower. A hybrid between two of the American species appeared a few years ago in the Arboretum and has been named *P. splendens*. This is a large-growing and very vigorous plant with unusually large scentless flowers, and one of the handsomest plants in the collection. Another supposed hybrid is *P. maximus*; this grows to a larger size than other Syringas and plants from twenty to thirty feet high can sometimes be found in old Massachusetts gardens where this plant is not rare. One of the greatest gardening triumphs was achieved by Lemoine at Nancy when a few years ago he had the happy inspiration to cross *P. coronarius*, the Mock Orange of old gardens, with the dwarf Rocky Mountain *P. microphyllus*, a shrub with small leaves and small very fragrant flowers. The first plant obtained by this cross was named *Philadelphus Lemoinei*; it is a perfectly hardy shrub four or five feet high and broad, with slender stems which are now bending under the weight of fragrant flowers which are intermediate in size between those of the two parents. Many distinct forms of this hybrid are in the collection.