The Arboretum early in July. The Arboretum at this time is not devoid of many conspicuous flowers, but for many persons its greatest beauty and interest is now found in the early summer foliage of its trees and other plants, its variety and various combinations. Thanks to the cool spring and often abundant rains, the foliage in the Arboretum has never been more luxurious, and the leaves on most of the Arboretum plants have rarely been so free of disease and disfiguring insects. There is certainly no other place where the maker of parks in the northeastern United States and in eastern British America can see such a variety of plants or learn how to use them to the best advantage in his work.

Cornus amomum. Attention is called again to the Silky Cornel because it is one of the best of all shrubs to plant in this climate near the banks of streams and ponds where a large mass of foliage to spread out over the surface of water is desired. Examples of this use of this shrub can now be seen at two of the small ponds near the end of the Meadow Road where this Cornel is now covered with flowers. These will be followed in autumn by bright blue fruit; in the winter the purple stems are attractive. The Silky Cornel is a good plant, too, to place in front of groups of trees and shrubs, but it must have room for the free growth of its wide-spreading branches, for when crowded by other plants the branches become erect, and all the character and beauty of the plant is lost. A space of not less than twenty feet in diameter is necessary for the development of a handsome plant of the Silky Cornel.
Rosa rugosa. This is a native of the coast sand-dunes of northeastern Asia from northern Japan to Kamtchatka, and is an old inhabitant of gardens. The thick dark green leaves seem able to resist the attacks of insects and the diseases which often discolor the leaves of many Roses. The flowers of the typical wild plant from Japan are red, but there are varieties with pure white and with clear pink flowers. The Kamtchatka plant, which is less ornamental than the Japanese plant, with smaller and thinner leaflets and smaller flowers is treated by many botanists as a species distinct from the Japanese plant and called by them Rosa kamtschatica. There is a double-flowered form of this continental plant in the Arboretum collection which produces flowers which are as ugly as it is possible that a Rose flower can become. No other Rose is harder than Rosa rugosa, and left to itself it spreads into great thickets. No shrub is better suited to grow in exposed positions on the New England coast; it grows equally well in the rich soil of the garden, and no other Rose is so valuable in this climate for making low hedges. Valuable as the Japanese Rosa rugosa has proved itself as a garden plant its greatest value is in its ability to transmit its hardiness, handsome foliage and large flowers to its hybrid offspring. Among these are already several beautiful garden plants which suggest that the plant breeder who wishes to produce new races of Roses able to grow and flower successfully in the northern states must combine Rosa rugosa and its hybrids with other hardy Roses. Rose breeders are singularly reticent about the plants they have used in their work, and there appear to be no printed records of the parentage of any of the Rugosa hybrids with the exception of the two which have been created in this Arboretum. One of the earliest of the Rugosa hybrids, Madame Georges Bruant, has pure white, semidouble flowers which continue to open until the coming of frost. More distinct is the plant named Conrad Ferdinand Meyer which was raised in Germany. This is a large shrub, with large, nearly double, clustered pink flowers. The foliage and flowers show little Rugosa influence, but its vigor and hardiness are probably derived from the Japanese parent. Blanc de Coubert is a handsome, double-flowered form. At least twenty other European hybrids of Rosa rugosa have received names. Roserie de la Hay is one of the handsomest of the hybrid dark red Roses. Another of the handsomest and most distinct of these hybrids was, raised several years ago by Paul & Sons of Cheshunt, England, by whom it was named Rosa rugosa repens alba. This plant has the foliage of Rosa rugosa, large flowers with petals between which there is more space than in the typical flowers of Rosa rugosa, and long, stout, prostrate stems. In England standards with weeping branches have been successfully grown by budding this Rose on the tall stems of other Roses, and it would probably prove one of the hardiest standard Roses which could be grown here. It can be trained over a fence or arbor, but can be best used to cover banks and the ground under other shrubs or small trees. The Japanese Rosa Wichuraiana was at one time largely used as a ground cover in the Boston Parks, but it has not always proved hardy, and Rosa rugosa repens alba is a better ground cover in this climate. This Rose has been growing in the Arboretum for several years and has now been planted on the fence close to the entrance to the Arboretum nursery on Prince Street. The two Rugosa hybrids
raised by Dawson at the Arboretum have proved to be good garden plants. In habit Lady Duncan resembles *R. rugosa repens alba* but the stems are not as stout; it can be used as ground cover or trained on an arbor or trellis. The flowers are rather smaller than those of *R. rugosa* and pure pink, and the leaflets are smaller and very lustrous. This Rose was obtained by crossing *R. rugosa* and *R. Wichuraiana*. The Arnold Rose, *R. arnoldiana*, was made by Dawson who crossed *R. rugosa* with the hybrid Tea Rose, General Jacqueminot. It is a stout bush with good foliage and large, bright red, single flowers, and when in bloom perhaps the showiest of the Roses in the Shrub Collection.

**Rosa multiflora cathayensis.** In 1804 a Rose reached England from China and when it flowered was found to have small, clustered, double pink flowers. It soon found its way to France and in 1821 received the name of *R. multiflora carnea*. Redouté made it the subject of one of his graceful Rose portraits in *Les Roses*, the most beautiful of the many books devoted to Roses. In 1817 another of the double red or pink-flowered *multiflora* Roses was sent from China to England and then to France. This plant received there the name of *Rosa multiflora platyphylla* and its portrait was also painted by Redouté. It was called in England the “Seven Sisters Rose” and soon became a popular garden plant in Europe and the United States. Now it has almost disappeared from gardens, having been replaced by the Rambler Roses of more recent introduction. The Crimson Rambler Rose, which is now one of the most popular Roses in the northern United States, is evidently a selected form of *R. multiflora platyphylla* and has been widely cultivated in China probably for centuries. From China it reached Japan, and in 1878 came from Japan to England. *Rosa multiflora* itself, which is a Japanese species with large clusters of small white single flowers, has been known to botanists since 1784 but did not reach England until about 1875. Seeds of this Rose were sent, however, from Germany a year earlier to the Arboretum where it has been largely used in the production of hybrid Rambler Roses. Nothing was known of the origin of the double pink and red-flowered Chinese *multiflora* Roses until 1897 when a French missionary, the Abbé Farges, sent from western China to Monsieur Maurice L. de Vilmorin seeds of a Rose which turned out to be a single pink-flowered *R. multiflora*, and certainly the plant from which they had been derived. A portrait of this plant in flower appeared in 1904 in the catalogue of the Fruticetum Vilmorinianum, but it was not named and seems to have been lost sight of. Wilson found it in western China, where it is very common, and collected seeds. William Purdom, also collecting for the Arboretum in Shensi in 1909, sent seeds here of this single-flowered Rose and the plants raised from these seeds are now flowering in the Arboretum for the third year. This Rose is now to be called *R. multiflora var. cathayensis*; it is a hardy, vigorous, and handsome plant with the habit of the Japanese *R. multiflora*. The flowers are from two to two and a half inches in diameter, and are produced in large, many-flowered clusters, and the large, conspicuous, bright yellow anthers add to the beauty of the clear pink petals. This Rose may well become a popular garden plant. It offers possibilities which the hybridist will undoubtedly take advantage of; and it is of considerable historical interest as the wild original of gar-
den plants cultivated probably for centuries by the Chinese and known in Europe and America for more than a hundred years. Plants covered with flowers and flower-buds can be seen with the other Chinese Roses in the Chinese Shrub Collection on the southern slope of Bussey Hill.

The Boursault Rose (*Rosa Lheritieranea*) is now covered with flowers. This Rose, which was raised in France early in the last century, is believed to be a hybrid of *R. chinensis* and the European *R. pendulina*. It owes its popular name to Monsieur Boursault who one hundred years ago had a garden in the Rue Blanche, now the Chausée d’Antin, famous for its collection of Roses. There have been several forms of the Boursault Rose but the one in the Arboretum collection, which has pale rose red, partly double flowers, was not formerly an uncommon plant in old New England gardens. It is a tall, vigorous and perfectly hardy shrub with gracefully spreading stems, and is well worth more common cultivation.

*Rosa caudata* was discovered by Wilson in western China and is one of the Cinnamomae section of the genus; it is a tall vigorous shrub with stout arching stems covered not very thickly with stout spines, dark green foliage, and flowers about two inches in diameter, in wide, sometimes twenty-five-flowered clusters. The beauty of the flowers is increased by the white markings at the base of the pure pink petals. The fruit is orange-red, an inch long, gradually contracted above into a narrow neck crowned by the much enlarged calyx-lobes. This handsome Rose is perfectly hardy and an excellent addition to the Roses of its class.

*Rosa bella* was introduced into the Arboretum from northern China and is a tall stout shrub which produces every year at the end of June great numbers of large rose-red flowers followed by showy fruits. A good garden plant for cold countries, *R. bella* might in the hands of a skilful plant breeder have a useful influence in a new race of hardy Roses.

*Potentilla tridentata* 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 clusters standing well up above the plant on long stems. It is well established in the Shrub Collection, and there is a larger mass of it on Azalea Path on Bussey Hill which is now covered with flowers.

The handsomest plant now in bloom in the Arboretum is the Chinese form of *Cornus kousa* on the eastern slope of Bussey Hill. It has been mentioned in a recent number of these Bulletins but not half enough has been said about it, and it is doubtful if a more beautiful plant has ever come from eastern Asia to the eastern United States. It will repay a visit just now by all plant lovers.

Laurel (*Kalmia latifolia*). Visitors to the Arboretum this year will lose its greatest flower show which for the last quarter of a century has been made every year by the long bank of Kalmias along the road at the northern base of Hemlock Hill. The plants are in good health and are beginning to make a vigorous growth, but on a very few of them are only occasional flowers. This failure to bloom has not happened here before and can only be accounted for by the fact that last year they were unusually full of flowers.