Some American Hawthorns. Among American Hawthorns are many species which are of exceptional value for the beauty of their abundant flowers, their bright-colored fruits and the brilliancy of their autumn foliage. A number of these plants can now be seen to advantage on the bank between the Shrub Collection and the Boston Parkway, and are best reached by the path leading to the right from just inside the Forest Hills gate. These plants were raised at the Arboretum from seed mostly planted between 1880 and 1885, and are therefore less than forty years old. None of these trees, however, have reached anything like their maximum size but are large enough to show their habit of growth and their character as garden ornaments. Hawthorns are usually long-lived plants, and individuals a hundred years old are not uncommon; and, although it takes several years to produce a good Hawthorn collection, once established the plants will go on improving and last for a long time. Hawthorns are easily raised from seeds which require two years in which to germinate. Large specimens are easily transplanted, and all the species thrive in any well-drained soil. Growing naturally, the species are most abundant in those parts of the country where the soil is impregnated with lime, and they are therefore particularly suited to give beauty to the parks and gardens of a large part of the United States where the presence of lime and the character of the climate prevent the cultivation of several classes of plants on which the gardeners of the coast region of the continent depend. Some of the species growing on the bank near the Shrub Collection which are now worth the attention of visitors are:
Crataegus nitida. This is a native of the bottom-lands of the Mississippi River near East St. Louis where it sometimes grows thirty feet high and forms a tall straight trunk. The wide-spreading lower branches and the erect upper branches form a broad, rather open unsymmetrical head. The leaves are long and comparatively narrow, and those near the ends of the branches are often deeply lobed; they are dark green and very lustrous, and turn yellow, orange or red late in October. The flowers are not more than three-quarters of an inch in diameter, and the scarlet oblong fruit rarely exceeds the length of half an inch. The flowers and fruit, however, are produced in great profusion; and, although many species have larger flowers and handsomer fruits, the habit of this tree, its beautiful foliage and its autumn color make C. nitida one of the handsomest Thorn trees. Many persons indeed place it with the six or eight most beautiful species of the genus.

Crataegus pruinosa. There is a good plant of this widely distributed eastern species on the bank. It is a small, round-topped tree with wide, dark blue-green, lobed leaves which late in the autumn turn dull orange or orange and red. The flowers are an inch in diameter in few-flowered clusters, and very conspicuous from the large, deep rose-colored anthers of the twenty stamens. The fruit, which is often nearly an inch in diameter, is nearly globose, bright blue-green covered with a glaucous bloom, and five-angled at the end of September; later it loses its angles, turns orange color and finally becomes dark purplish red and very lustrous. Both when it is in flower and when the fruit is red this is a very ornamental plant.

Crataegus aprica. There are two plants of this species in this collection. They are interesting as representing a peculiar group of the genus (Flavae) which is confined to the southeastern United States. C. aprica is a tree sometimes twenty feet high in the low valleys of the southern Appalachian Mountains which are its home. This plant is attractive just now for the small leaves have turned bright orange and red and the branches are thickly covered with its small clusters of dull orange-red fruits. These plants were raised from seed presented to the Arboretum in 1876 by Asa Gray as Crataegus coccinea, the name by which most red-fruited American Hawthorns were known until the systematic study of the genus was undertaken some twenty years ago.

Crataegus coccinoides. There is a good plant of this Thorn in this collection. It is a round-topped densely branched tree with broad, thin, dark green, ovate, lobed leaves from two to three inches long which are now bright orange and scarlet. The large flowers are produced in very compact, nearly globose, from five- to seven-flowered clusters and are conspicuous from the large size of the deep rose-colored anthers of the twenty stamens. The fruit which is a good deal covered by the foliage, ripens and falls gradually during the month of October and is subglobose, nearly an inch in diameter, dark crimson, very lustrous and erect on short pedicels in compact clusters. This handsome
plant is a native of the region in the neighborhood of St. Louis. The compact flower and fruit clusters readily distinguish it from allied species.

**Crataegus succulenta.** This is a good representative of a peculiar group of Thorns (*Tomentosae*), distinguished from the other groups by the deep longitudinal cavities on the inner face of the nutlets of the fruit. The leaves of this Thorn are thick, lustrous, dark green, elliptic in outline, lobed only above the middle, and not brilliantly colored in the autumn. The flowers with twenty stamens and small rose-colored anthers hang on long slender stems in many-flowered clusters. The fruit is two-thirds of an inch in diameter, scarlet and very lustrous, and its beauty is increased by the contrast of color with the dark green leaves among which it is suspended.

**Crataegus fecunda.** This is also a native of the St. Louis region and is a good representative of the great *Crus-galli* Group of which the well-known Cockspur Thorn is the type. *C. fecunda* is a large, round-topped tree with lustrous leaves broadest at the apex, small flowers with rose-colored anthers in many-flowered clusters, and abundant orange-red fruits which droop on slender stems. Other plants in this collection to which attention is called are *C. prunifolia*, *C. Douglasii*, the black-fruited species of the Puget Sound region, of which there is a large specimen here, *C. rivularis* from the southern Rocky Mountain region, a smaller tree also with black fruit, *C. arkansana*, *C. Arnoldiana*, *C. Dawsoniana*, and forms of the European *C. oxyacantha*.

**Crataegus on Peter's Hill.** A large number of Thorns in the Peter's Hill Collection have flowered this year and several of them are now bearing good crops of fruit. Of special interest just now are the plants of the *Intricatae* and *Uniflorae* Groups, many of which are covered with fruit. These groups are of particular interest to gardeners for, with a few exceptions, they are small shrubs and begin to bloom when only a few years old. The flowers which usually open later than those of most of the Thorns, are large and showy with either yellow or rose-colored anthers. The fruit, which is large and usually sub-globose, is on different individuals scarlet, crimson, orange-color, green or yellow, and the leaves of most of the species turn late in October to beautiful shades of orange, red or scarlet. This group of shrubs is at the eastern base of Peter's Hill on the lower side of the drive and near a large White Oak. Some of the species which are most attractive at this time are *C. fruticosa*, *C. Bissellii*, *C. Peckii*, *C. Smithii*, *C. foetida*, *C. modesta*, *C. nemoralis*, *C. cuprea*, *C. intricata*, *C. Boyntonii* and *C. Buckleyi*. Long overlooked by botanists, these little plants have not yet found the place in gardens which, when better known, they are destined to occupy.

**Crataegus punctata.** There is a group of this Thorn on the southern side of the Overlook on Bussey Hill which well shows the variation in the color of the fruit on different individuals of this species. On some of these plants the fruit is red, and on others yellow, orange color or
rose. *C. punctata* is one of the largest and most widely and generally distributed of the species of the eastern states where it is often a tree thirty feet tall with wide-spreading branches which form a flat or round-topped head of great beauty. This species, which has been known for more than a century and is often cultivated, is peculiar in the fact that some individuals have flowers with rose-colored anthers and others have flowers with yellow anthers, and that the plants with the rose-colored anthers produce red fruit while those with yellow anthers produce yellow fruit.

**Crataegus cordata.** Near the group of *C. punctata* on the Bussey Hill Overlook are two large plants of *C. cordata* or the Washington Thorn, as it is sometimes called. This is a narrow tree sometimes thirty feet tall with erect branches and small nearly triangular lustrous leaves which are now beginning to turn bright scarlet. The small globose fruits are also turning scarlet and will remain on the branches until spring with little loss of beauty. This is the latest of all the species of Crataegus in the Arboretum to flower. The only drawback to this handsome little tree is found in the brittleness of the branches which are often broken by high winds. A century ago it appears to have been frequently used in the middle states as a hedge plant.

**An autumn-flowering Lilac.** Lilac flowers in October are not common, but *Syringa microphylla*, which flowered the middle of June, began to bloom again six weeks ago and is still covered with flowers. It is a native of north central China and is a hardy, free-growing shrub with small leaves and small, pale rose-colored, fragrant flowers in small narrow clusters. It is far from being one of the handsomest of the Lilacs, but if it keeps up the habit of flowering for a second time in autumn it will be at least interesting even if other Lilacs are more beautiful.

**Stuartia pseudocamellia.** This small Japanese tree is of interest at this time on account of the dark bronze-purple color of its autumn leaves which is unlike that of any other plant in the Arboretum. It should be grown, too, for its pure white cup-shaped flowers which resemble those of a single-flowered Camellia. This Stuartia is a narrow tree with slender erect branches and pale gray, smooth bark which separates in large thin plates. It grows slowly but is perfectly hardy. Two specimens can be seen on the upper side of Azalea Path.

**Enkianthus perulatus, or *japonicus* as it is perhaps better known, is unusually handsome this year, equaling and even surpassing the Highbush Blueberry (*Vaccinium corymbosum*) in the brilliant scarlet of its autumn leaves. Unlike *Enkianthus campanulata* it is shrubby in habit and forms a dense broad bush. The white bell-shaped flowers are attractive, but in the Arboretum the plants have not produced seeds, and this Enkianthus is therefore rare in American gardens. It is found, however, in all Japanese gardens where it is grown for its autumn colors and where it is usually cut into dense balls. The best collection of Enkianthus is on the lower side of Azalea Path, where several species are flourishing.