The Arboretum in October. This is one of the best months for a visit to the Arboretum, and after the abundant rains of the summer it has never looked better at this season of the year than it does now. The grass is as green as it usually is in early June. Frost has only touched the leaves of a few of the Grapevines which are perhaps more susceptible to frost than those of any other perfectly hardy plants; the leaves of only a few trees have fallen and on others they are as green as they were at midsummer, while in all directions are spots of brilliant autumn color varying with every intermediate shade from the bright clear yellow of the Tulip-trees, the Sugar Maples and the Paw-paws to the scarlet of the Gum-trees and Virginia Creepers.

Autumn flowers are not abundant in the Arboretum in October, although a few may still be found here. The northern Witch Hazel, *Hamamelis virginiana*, however, is covered with its flowers which are conspicuous with their clear yellow strap-shaped petals. The autumn color of the leaves of this plant is also yellow but of a darker shade than the flowers, and the leaves usually do not fall until the flowers begin to open; these, however, remain for a long time in good condition on the naked branches, making this shrub one of the most attractive features of forest borders in the eastern states. This Witch Hazel may be seen in the Witch Hazel Group on the Meadow Road near its junction with the Bussey Hill and Forest Hills Road, and it has been largely planted in the general Arboretum plantations where many large specimens may be found.

*Gordonia alatamaha.* Flowers are still opening on this beautiful southern tree. They first appear in September and open in succession
for fully six weeks. Gordonia is related to the Camellia, and the pure white flowers which vary from three to three and a half inches in diameter, although more cup-shaped, resemble single Camellia flowers. This small tree was discovered in 1765 near Fort Barrington on the Altamaha River; it has entirely disappeared, however, as a wild plant, and it has only been preserved by the specimens cultivated chiefly in the neighborhood of Philadelphia where it was sent by its discoverers. There are well established plants on Hickory Path near Centre Street and on Azalea Path, and in these sheltered positions the plants are doing well and have not suffered at all in recent severe winters. This Gordonia, however, grows more rapidly and to a larger size in the middle states and there are many good specimens in Pennsylvania gardens.

abela grandiflora on Hickory Path near Centre Street is still well covered with flowers. These resemble in shape the flowers of some of the Honeysuckles; they are white faintly tinged with rose color, and their delicate beauty is set off by the small, dark green and lustrous leaves. *Abelia grandiflora* is a slender shrub with arching stems from three to four feet high and is thought to be a hybrid between two Chinese species. Until the introduction by the Arboretum of some of the species of this genus from western China it was believed to be the hardiest of the Abelia. In the Arboretum it suffers in severe winters but in sheltered positions it flowers well every year and the flowers continue to open during nearly two months. This Abelia has become an exceedingly popular plant in the gardens of the southern states and is cultivated with more or less success as far north as New York.

The Chinese Buddleias. The flowers are still in good condition on the different forms of *Buddleia Davidii* or, to use its more common name, *B. variabilis*. This plant has one-sided, pointed, many-flowered clusters which curve downward from arching stems and are thickly covered with small, blue-purple, fragrant flowers. In some of the forms of this plant are found perhaps the most beautiful of all summer and autumn flowering shrubs, and although only recently brought to the United States and Europe by Wilson they are already largely planted in this country where they have received the name of Summer Lilacs. Here at the north *Buddleia Davidii* is not perfectly hardy, and the stems are killed to the ground by cold, but new stems spring up and as the flower-clusters are produced at the ends of branches of the year this severe pruning improves the flowers. Few plants in their season are better suited to supply cut flowers, and for this purpose as well as for garden decoration this Buddleia in its various forms has proved one of the most useful shrubs of recent discovery.

The period for flowers in the Arboretum. It has been shown by the Arboretum that flowers can be found here in Massachusetts on trees and shrubs growing in the open ground during every month of the year with the exception of December. There will still be flowers on the native Witch Hazel in November and before the end of January the flowers will be open on the Witch Hazel of southern Missouri and Arkansas, *Hamamelis vernalis*. These will soon be followed by the
flowers of the Japanese and Chinese Witch Hazels which last well through February and do not suffer from the severest cold eastern Massachusetts ever has to endure. Then before the end of March the flowers of some of the Willows open and begin the long procession which only ends in November. The introduction of the Asiatic Witch Hazels has added greatly to the interest of northern gardens in winter and they are bright and cheerful winter companions. They might, therefore, well find a place near every country home and in small city yards. The flowers of the Chinese species, *Hamamelis mollis*, are larger and of a brighter yellow color than the flowers of the other Witch Hazels and this promises to be the best worth cultivation of them all. It is a perfectly hardy vigorous shrub, grows rapidly, and begins to flower when only a few feet high. Specimens of all the species of *Hamamelis* are planted in the group of these plants on the Meadow Road, and the best specimen of *Hamamelis mollis* is on Hickory Path near Centre Street.

**Evonymus alatus.** The leaves of many of the trees and shrubs of eastern Asia turn to as brilliant colors in the autumn as those of the related species of eastern North America. Usually, however, the leaves of the Asiatic species change color later than those of the American species, and in Japan the best color effects are in November or a month later than here. There are, of course, many exceptions to this general rule. The leaves of *Evonymus alatus*, for example, were brilliant in the Arboretum ten days ago and are already beginning to fall. This is a shapely shrub six or eight feet tall and ten or twelve feet broad, distinguished by the corky wings of the branches. The flowers, as in all the species of this genus, are not conspicuous and the fruit is smaller and less showy than that of many of these plants. The great value of this hardy Japanese Burning Bush is therefore found in the autumn coloring of the leaves, which assume a deep rose color of exquisite beauty and unlike that produced by any other hardy plant in cultivation.

**Acer ginnala.** The leaves of this Maple also turn and fall by the middle of October, and equal or surpass in their autumn scarlet those of any American plant. *Acer ginnala* is a small shrubby tree with deeply dentated leaves, sometimes thirty feet high, and very common along forest borders near Vladivostok and in other parts of eastern Siberia. The flowers are produced in rather compact clusters and, unlike those of other Maples, are distinctly fragrant. This Maple is one of the first Siberian trees introduced by the Arboretum and it is now gradually finding its way into general cultivation in this country.

**Nyssa sylvatica.** There is perhaps no more beautiful object this week in the Arboretum than the group of these trees variously known as Sour Gum, Tupelo and Pepperidge. The scarlet and orange colors of the leaves of the Sour Gum in October are probably not surpassed by those of any other American tree and their beauty is increased by the lustre of the leaves which adds to their autumn brilliancy. The Tupelo is a common and widely distributed tree, occurring from Maine to Florida, Missouri and Texas. At the north, especially near the coast, it is usually found near the borders of swamps and ponds, and is a low,
flat-topped, shapely tree with wide-spreading branches; in the interior of the country and especially on the slopes of the high southern Appalachian Mountains it grows sometimes a hundred feet high and forms a tall, massive trunk often five feet in diameter and a narrow head of erect branches. The flowers are inconspicuous, and the small, dark blue, plum-like fruit is so hidden by the leaves that it does not make much show. The beauty of this tree is found in its habit and in the thick dark green, shining leaves. The long hard roots make the Sour Gum difficult to transplant and only very small plants can be successfully moved. It is not therefore often found in nurseries and has never received the attention from planters of ornamental trees which it deserves. The group of this tree is at the lower end of the Bussey Hill Road near the small pond, at the junction of this road with the Meadow and Forest Hills Roads.

Halesia tetraphylla, var. monticola. The Silver Bell tree of the southern states, Halesia tetraphylla, has long been cultivated in northern gardens. It is usually shrubby in habit with several stout wide-spreading stems, and here at the north, rarely grows more than fifteen or twenty feet high. It is an inhabitant of the southern states from West Virginia to southern Illinois, northern Florida and eastern Texas. It grows at low altitudes and does not appear to ascend to the slopes of the high Appalachian Mountains, although the Halesia of those mountain forests was long considered identical with the lowland tree. The Halesia of the high slopes, however, is a tree often eighty or ninety feet high, with a trunk three feet in diameter, sometimes free of branches for a distance of sixty feet from the ground. It is apparently only in recent years that this mountain tree has been introduced into cultivation by the Biltmore Nursery. From Biltmore it was sent to the parks of Rochester, New York, and from Rochester it came to the Arboretum with a description of its peculiar habit, large flowers and fruit. The mountain tree which has lately been distinguished here as var. monticola grows as a tree from the time the seed germinates and the seedlings show no variation of habit. Young trees are clean stemmed with short branches which form a narrow pyramidal head. The leaves are of rather different shape and less hairy than those of the lowland tree; the flowers are fully a third larger and the fruit is nearly twice as large. Trees less than ten feet produce flowers and fruit in abundance. There is now every reason to believe that the mountain Halesia will prove one of the handsomest flowering trees of large size which it is possible to cultivate in this climate. Its tall trunk and narrow head suggest that it may prove a good street and roadside tree. Two young trees now covered with fruit are growing on the upper side of Hickory Path near Centre Street; growing with them is a plant of the lowland form, also covered with fruit, so that it is possible to compare these two forms as they appear at this season of the year.

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