BULLETIN NO. 55.

The number of trees and shrubs really valuable here which western Europe has contributed to New England plantations and gardens is not large. Of the trees the Beech, two or three of the Elms, the Birches, the Mountain Ash, the Laburnums, the Norway Maple, the Hawthorn, the Hornbeam, the Poplar, several Willows, the Alder, two or three of the Cherries, the Plum, the Apple and the Pear flourish in this climate. Although some of them will drag out a more or less unhappy existence for several years, the Oaks of western Europe, the Ash, the Sycamore Maple, and all the conifers are not desirable trees for our region. From western Europe, too, we have obtained a few shrubs which are important in New England gardens. The Heather gives summer brightness to New England gardens and hillsides, and the little Daphne cneorum, a native of the mountains of central Europe, is now covered with its clusters of fragrant rose-pink flowers. One of the most beautiful of all dwarf shrubs suitable for the decoration of the rock-garden, it is rather capricious as to soil and situation, and does not always flourish in this country as well as it does in the Arboretum.

None of the Barberries which have been brought into our gardens in the last thirty years is more useful than the common European Berberis vulgaris which has long been naturalized in eastern Massachusetts and years ago was selected by one of the wise men of Boston as a typical New England plant for the decoration of a monument to be erected to some departed New England worthy. For thirty years, too, much attention has been paid to the introduction and cultivation of the different species of Privet from eastern Asia, but there is not one among them which is as valuable in New England as the common Privet of Europe which must have been cultivated here for two hundred years and is now sparingly naturalized in some of the eastern states. The black and shining berries in large terminal clusters are unsurpassed in beauty by those of any other black-fruited shrub which can be grown here, and as they remain in good condition until into the winter they are valuable on the plants and, when cut, for late autumn and early winter decorations. Among the shrubs of western Europe which are really valuable in New England must be included the Wayfaring-tree, Viburnum Lantana. With the exception of the Korean Viburnum Carlesii mentioned in a recent bulletin, and of our native northern Hobblebush, Viburnum alnifolium, the Wayfaring-tree is the earliest of the Viburnums to flower. It is a tall, compact, round-headed shrub with large, thick, dark green leaves and broad, compact, convex clusters of white flowers. The fruit when fully grown is bright red but finally turns black, fruits of the two colors often appearing at the same time in the same cluster. This shrub is therefore as beautiful in the early autumn as it is in the middle of May; it can be seen in the general Viburnum collection near the junction of the Bussey Hill and Valley Roads, and it has been largely planted in the Boston parks. Near it and just coming into flower are several plants of Viburnum burejaeticum from Manchuria, Korea, and northern China. This is a neat shrub with small leaves and small compact clusters of creamy white flowers which are followed by small black fruits. As compared with most of the American Vibur-
nums it has little to recommend it as an ornamental plant; indeed, with a few exceptions, the eastern Asiatic Viburnums are less valuable than the eastern American species, among which are found garden shrubs of the first class. Viburnum dentatum and V. Wrightii from Japan, with bright red fruits, have no American counterparts, however, and should therefore be cultivated for the autumn garden. These two species will soon be in flower in the Viburnum collection where can now be seen nearly every species and variety which can be grown in this climate.

The large creamy white flowers of Magnolia Fraseri are already opening and the leaves are half-grown. This is a small pyramidal tree of rather open habit from the slopes of the Appalachian Mountains from southern Virginia southward, sometimes growing on the headwaters of the Savannah River, where it is most abundant, to the height of thirty or forty feet. In cultivation it begins to flower when not more than half that size, and here in the Arboretum it flowers abundantly every year and is perfectly hardy. This beautiful tree is still too rare in American collections. The much smaller, greenish or yellowish green flowers of the Cucumber-tree, Magnolia acuminata, will soon follow those of M. Fraseri. The Cucumber-tree, which under favorable conditions sometimes attains the height of eighty or ninety feet, is the largest Magnolia which can be grown in New England and the most northern in its range of all the American species. The flowers of the Cucumber-tree will soon be followed by those of another American species, Magnolia cordata. This in the Arboretum is a smaller tree with darker green leaves and small, cup-shaped, canary-yellow flowers. This Magnolia was discovered more than a century ago by the French botanist Michaux somewhere on the headwaters of the Savannah River in Georgia or South Carolina. A little later it was found by Michaux and his son, F. A. Michaux, in the neighborhood of Augusta, Georgia. It was introduced into France by Michaux and the descendants of these trees are now cultivated in the United States and Europe. For many years attempts to rediscover this tree in the regions visited by Michaux have been unsuccessful, and it is interesting therefore to report that the Berckmans of Augusta, Georgia, have recently found Magnolia cordata in two stations a few miles south and west of Augusta. The plants are growing in upland Oak and Pine woods, the largest of them being seven or eight feet tall. The plants begin to flower when not more than three feet high, and in April of this year some of these shrubs bore forty or fifty flowers. In cultivation Magnolia cordata is always a grafted tree, but it is not probable that the cultivated trees owe their greater size to a stronger stock, and the small size of the plants discovered near Augusta may be due to dry soil and a hot climate, and Magnolia cordata as a tree may still be found in some of the moist rich valleys of the small streams flowing down the eastern slopes of the Blue Ridge.

Several handsome American Hawthorns (Crataegus) are in full bloom, leading a procession which will last for nearly six weeks. The earliest of these plants to flower here belong to the Molles section of the genus in which some twenty species are now recognized. They are all shapely round-topped trees, some of them growing to a comparatively large size. The flowers are large, in broad many-flowered clusters; the leaves are broad, thin and long-stalked, and on most of the species
begin to unfold as the flowers open. The fruit of these plants is globose or pear-shaped, crimson, scarlet or rarely yellow, and of excellent flavor. The plants of this group are comparatively rare in the east; they do not extend into the southeastern states, and are most abundant in the region from Illinois and Iowa, through Missouri and Arkansas, to eastern Texas. Of this group there are now in flower at the South Street entrance large plants of *C. mollis*, *C. submollis*, and *C. arkansana*. The last is a particularly valuable plant as it retains its brilliant fruit until late in the season and longer than the other plants of this group. Another interesting plant of this group, *C. Arnoldiana*, is valuable because the fruit ripens in August when showy fruits are rare here. This tree was first discovered growing wild in the Arboretum and is still known only from a few stations. It is one of the few species of *Crataegus* which can be easily recognized in winter when its strongly zigzag branches are conspicuous. There are large plants of this tree on the left of the Centre Street entrance, and there are a number of them on the Valley Road in front of the Oak Collection. All of the species of the Mollis Group are American with one exception, *Crataegus peregrina*, which is probably a native of Persia. From the American species it differs in the color of the fruit which is dark purple, unlike that of any American Hawthorn. This plant is in flower in the old Crataegus Collection on the bank between the Shrub Collection and the Arborway boundary of the Arboretum, in which there are also plants in flower of *C. arkansana* and *C. Arnoldiana*.

Many plants in the Plum Collection now deserve inspection, notably *Prunus hortulana* and *P. Munsoniana*, both natives of the Missouri-Arkansas-Texas region, the latter the Wild Goose Plum of pomologists. Many of the early flowering Crabapples are still in good condition and the flowers of many others are still to open.

In the general Rhododendron Collection at the base of Hemlock Hill *R. carolinianum* is in flower. This is a native of the slopes of the southern Appalachian Mountains. Although this plant was sent to England more than a century ago, it has been entirely lost sight of until a few years ago, having been confused with *R. minus* or *punctatum*, a southern plant of lower altitudes, different habit and foliage and less attractive flowers. *R. carolinianum* flourishes in the shade and in full exposure to the sun. It is a dwarf plant of compact habit; the leaves are dark green, and the comparatively small pink flowers are borne in compact clusters. It is perhaps as hardy in New England as any Rhododendron, and it is certainly a plant of great promise either for the decoration of parks and gardens or a possible element in a new race of hybrids. Several plants of *Rhododendron coreanum* are in flower on Azalea Path. This species, which was discovered by Mr. Jack in Korea, is also a plant of much promise; it is one of the species with deciduous or nearly deciduous leaves; the habit is good, and the abundant flowers are of a pleasant rose-purple color. Judging by the experience with it in the Arboretum during the last two or three years it is one of the best of the recent introductions of its class.

When this bulletin reaches its readers many of the plants in the Lilac Group will be in flower, and persons interested in Lilacs should visit the Arboretum during the next week.

**The Arboretum will be grateful for any publicity given these Bulletins.**