The Horsechestnut (Aesculus Hippocastanum) growing naturally in a restricted area has the power of flourishing and reproducing itself in regions with climates as unlike as those of eastern New England and western Scotland. The home of this tree among the mountains of northern Greece is of such limited extent that, although the Horsechestnut has been cultivated in Europe for more than three centuries, it is only in comparatively recent years that the wild tree has been discovered. The Grecian Horsechestnut is one of the noblest of the exotic trees cultivated in the United States, but for the development of its greatest beauty it requires deep, rich, moist soil and abundant space for the spread of its branches. Few other trees suffer more from smoke, dust, and the other unnatural conditions of city life. There are a number of forms in cultivation but none of them equal the typical tree in beauty. One of the best known of these abnormal forms is the variety with double flowers (var. Baumannii, or flore pleno). This form flowers later than the single-flowered tree and the flowers last a long time in good condition. There are varieties with erect branches (var. pyramidalis) and with erect and spreading branches forming a round-topped tree (var. umbraculifera); and there are varieties with variously incised leaflets (var. incisa and var. laciniata), and with leaves blotched with yellow (var. variegata), but these are all horticultural curiosities and of no interest to the general planter.

The so-called red-flowered Horsechestnut, which appeared in Europe many years ago, although its origin is not entirely clear, is probably a hybrid of the common Horsechestnut with the red-flowered A. Pavia of the southeastern United States. The right name of this tree is A. carnea, although it is often found in nurseries under the name of A. rubicunda. It has the general habit and appearance of the common Horsechestnut, but it is a smaller tree and blooms later, and the flowers on different individuals vary from red to pale rose color. The handsomest form (var. Briottii) has deep red flowers and is one of the most ornamental of the arborescent Horsechestnuts. The Japanese Horsechestnut (A. turbinata) is rather closely related to the Grecian tree and resembles it in general appearance, although the flowers are less showy. In its native country this is a large and handsome tree, and it promises to be a valuable ornamental tree here. The largest specimen in the United States is in Rochester, New York, where the Japanese Horsechestnut has flowered and produced large crops of seeds for several years. The Himalayan Horsechestnut, the species from central China discovered by Wilson, and the California species are not hardy here, and the north China Horsechestnut is not yet established in the Arboretum.

Southeastern North America is the real home of the Horsechestnuts, judging by the multiplication of species in that part of the world where a number of interesting and valuable new forms have recently been discovered. The earliest of the American species to flower is the so-called Ohio Buckeye, A. glabra, which has now been in bloom for ten days. This is a small tree with pale yellow flowers, fruit like that of the Grecian tree covered with prickles and dark bark exfoliating in thin flakes. There is a tree of the Ohio Buckeye in the Horsechestnut Group on the Meadow Road, but the largest specimen in the Arboretum is on the left-hand side of the South Street entrance. A form of this tree with usually seven instead of five leaflets (var. Buckleyi) is
not otherwise different from the common form and flowers with it in the rear of the Horsechestnut Group. Near this is another form of this tree (var. leucodermis) from southern Missouri and Arkansas, with pale bark which blooms about two weeks later than the type and is just coming into flower.

The other yellow-flowered arborescent Horsechestnut of the eastern states (A. octandra) differs from the Ohio Buckeye in the absence of prickles from the fruit. It is a larger tree, growing sometimes on the slopes of the southern Appalachian Mountains to the height of eighty feet, and blooms a week or ten days later. This is a valuable ornamental tree which is now rarely found in collections. The other arborescent species of the southern states, the red-flowered A. Pavia, is not yet established in the Arboretum, although some garden forms of this tree (var. atrosanguinea and var. Whittleyi), flower here freely.

From a race of hybrids between A. octandra and A. Pavia some valuable garden plants have been obtained. This hybrid appeared in Paris at the beginning of the last century and the correct name for it is A. hybrida, although in recent European publications it is sometimes called A. versicolor. The flowers are of different shades of red, and individuals differ in foliage, in the size and color of the flowers, and in their time of opening. There are two large bushy specimens of this hybrid quite different from each other in appearance in front of the Horsechestnut Group and next to A. glabra on the Meadow Road, and other forms can be found in the rear of this group. Of recently described species from the southeastern states only A. georgiana from central Georgia will flower this year. This is a broad, round-topped shrub, growing sometimes to the height of five or six feet, with large red and yellow flowers in long compact clusters, and a plant of much promise as a garden ornament. A large bed of this shrub will be found on the path in the rear of the Horsechestnut Group and opposite the mass of A. parviflora. This well known shrub is the last of the Horsechestnuts to flower and its tall narrow spikes of white flowers will not open before midsummer. Near this bed are beds of young plants of the yellow-flowered A. arguta, a small shrub from eastern Texas, and of the beautiful red-flowered shrub or small tree from the southern and southwestern states usually called A. austrina. Much attention has been paid to the formation of the Arboretum collection of Horsechestnuts and it will well repay the attention of persons interested in a beautiful genus of now too little known trees and shrubs well suited for the decoration of northern parks and gardens.

Among the American Magnolias in the group on the right-hand side of the Jamaica Plain entrance M. Fraseri is already opening its large cream-colored flowers which are conspicuous on the ends of the branches. This small tree is a native of the southern Appalachian Mountains and is perfectly hardy in the Arboretum. The small, bright canary yellow flowers of M. cordata open almost at the same time. This Magnolia was sent from the United States to France more than a hundred years ago and is now only known in the descendants of the trees cultivated in France, all attempts to find the wild trees in recent years having proved unsuccessful. This is a shapely, desirable and perfectly hardy ornamental tree. The leaves are dark rich green; the abundant flowers are of an unusual color for those of a Magnolia, and the second crop of flowers which these trees usually produce in summer adds to its value. The cultivated trees produce no seeds, and as
it can only be propagated by grafting *Magnolia cordata* is rare in collections.

Some of the most beautiful and interesting shrubs now in flower will be found among the Bush Honeysuckles. The decorative value of some of these can best be seen in the grass border by the Bussey Hill Road, opposite the Lilac Group, where several of these shrubs have been so planted that they have abundant space for full development and can show all their beauty of foliage, flowers and fruit. In the Shrub Collection there are a large number of these plants, and others can be found in the supplementary collection in the border on Linden Path in the rear of the group of Linden trees. In the Shrub Collection several interesting species are in flower or will soon be in flower. Attention is called to *Lonicera syringantha* and its variety *Wolffii* from western China, with purple fragrant flowers, and to *L. tibetica*. Two charming plants in this collection are *L. amoena* and *L. amoena Arnoldiana*, the latter a product of the Arboretum. They are garden hybrids, with slender pink flowers, of the Tartarian Honeysuckle, with *L. Korolkowii*, a species of central Asia. Other Honeysuckles now in bloom which should be examined are *L. bella*, a large and vigorous hybrid of *L. Morrowii* with the Tartarian Honeysuckle, *L. minutiflora*, remarkable in the beauty of its brilliantly colored fruits, *L. notha*, a hybrid of the Tartarian Honeysuckle with *L. Ruprechtianna* of eastern Siberia, *L. minutiflora* from central Asia, and the slender and graceful *L. coerulea graciliflora* with its beautiful drooping flowers. Of the shrubs introduced by the Arboretum into New England gardens none is now more generally cultivated or has proved more valuable than *L. Morrowii* from northern Japan. This in cultivation here is a broad high bush with wide-spreading branches clinging close to the ground. The pale blue-green leaves are pleasant in tone, and the yellow flowers are produced in the greatest profusion. This remarkable shrub, which has been largely planted in several of the Boston parks, appears to grow here more vigorously than it does in its native country.

On Azalea path the red-flowered *Rhododendron (Azalea) Kaempferi* is in flower. There are masses of this plant on both sides of the lower end of this path and between the Hemlocks and the Laurels at the northern base of Hemlock Hill. The shade and coolness of this position suit this inhabitant of the high mountains of Japan, and it flowers later here than on Azalea Path and the flowers remain longer in good condition. These flowers, in front of the dark background of Hemlocks, make one of the most brilliant shows of the Arboretum season.

The earliest of the American Rhododendrons to flower, *R. carolinianum*, is opening its flowers in the collection at the base of Hemlock Hill. This is a southern plant with handsome, very dark green leaves and small clusters of bright pink flowers. It grows at a considerable elevation on the Appalachian Mountains and although it was known in England and recognized as a distinct variety as early as 1810, it was afterwards confused with another southern species, *R. punctatum* and entirely lost sight of; and it is only recently that a comparison of the two plants in cultivation has shown the differences between them. It is perfectly hardy and a valuable garden plant. *R. punctatum* is a plant of lower altitudes with smaller leaves and flowers; it blooms several weeks later and is a less valuable plant.

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