Horsechestnuts and Buckeyes. Horsechestnut as generally applied is the name of the Old World species of Aesculus, and Buckeye is commonly used for the American species of this genus. The Old World species which are found in southeastern Europe, on the Himalayas, in central and northern China and in Japan have white flowers often marked or tinged with yellow, but the flowers of the American species are yellow, red, scarlet, red and yellow, and white. The European species, however, are best distinguished from those of the New World by the resinous exudations which thickly cover their winter buds and are not found on those of the American species with the exception of the one which grows in California (A. californica). The original Horsechestnut, Aesculus Hippocastanum, long cultivated in western Europe but only in recent years known to be a native of the mountains of Greece, is the handsomest of the whole genus and one of the most splendid trees in the world. It was brought to America at least one hundred and fifty years ago, and there are noble specimens in many of the seaboard cities and towns of the eastern states. The Himalayan Horsechestnut and the species of central China are not hardy here; it has not yet been possible to establish the north China Horsechestnut in the Arboretum, but the Japanese species (A. turbinata) is hardy and grows fairly well here, although it is less satisfactory in cultivation and a less beautiful tree than the Grecian Horsechestnut. The earliest of these trees to flower here are the Ohio Buckeye and its varieties. They are small trees with small yellow or yellow-green flowers, and fruit covered like that of the Old World Horsechestnuts with prickles. These trees have no great value as ornamental trees, but are inter-
esting in having furnished from their fruit one of the great states of the union with its popular name. A related species, *A. arguta*, has not before bloomed so well in the Arboretum. It is a small yellow-flowered shrub, with leaves composed usually of nine narrow long-pointed leaflets, which has been found only in west central Oklahoma and in a few places in northern and central Texas. The yellow-flowered Appalachian species, *A. octandra*, the largest of the Buckeyes, blooms a little later, but a shrubby species from central Georgia (*A. georgiana*) is just now covered with its short compact clusters of large yellow and red flowers. Of recent discovery and introduction this Buckeye has proved a first-rate garden plant in this climate. *Aesculus Pavia*, the best known, in books at least, of the red-flowered southern Buckeyes, is in bloom this year for the first time in the Arboretum. An even more beautiful plant, the red-flowered variety of *A. discolor* (var. *mollis*) will be covered in a few days with its scarlet flowers. Generally distributed from the coast of North Carolina to southern Arkansas and western Texas, and when in flower one of the most brilliant plants of the south, it is a matter of congratulation that it can be grown successfully in Massachusetts. Many of the handsomest of the Horsechestnut-trees are natural hybrids. The first of these appeared in France more than a century ago and is evidently a cross of two American species, *A. octandra* and *A. Pavia*. There are many forms of this hybrid to which the general name *A. versicolor* has been given. The flowers are red and yellow in various degrees and some of these forms can be placed among the most beautiful of the Buckeyes. The next hybrid appeared many years ago in a nursery at Ghent in Belgium, evidently a cross between the common Horsechestnut and the American red-flowered *A. Pavia*. This is the common red-flowered Horsechestnut of gardens the name of which is *A. carnea*. The flowers vary from flesh color to the deep red of those of the tree known as *A. Briotii*. Trees of this and other varieties of the red-flowered Horsechestnut are now in bloom in the Horsechestnut Group on the right-hand side of the Meadow Road. A single tree of an interesting hybrid Buckeye, *A. Bushii*, was found a few years ago in the woods near Fulton on the Red River in Arkansas, evidently produced by the crossing of a form of *A. glabra* with the red-flowered *A. discolor* var. *mollis*. The original tree has disappeared but this hybrid is fortunately preserved in a tree growing on Peter's Hill in the Arboretum where it has flowered regularly for several years. This perhaps is the rarest tree in the Arboretum.

**American Magnolias.** Several of these trees are in bloom in the group on the right-hand side of the Jamaica Plain Gate. Unlike most of the Asiatic species the American Magnolias flower after the appearance of the leaves; they are hardy and handsome trees. A hundred and fifty years ago letters of English plant lovers written to their American correspondents contained many appeals for Magnolia plants and seeds, and in the early years of the nineteenth century these trees were to be found in the principal collections of plants in the middle states. To the present generation they are almost unknown, and it is only in a few American nurseries that an occasional plant of one or two of the species can be found. There are six of these Magnolias, but one of them, *M. pyramidata*, grows only in the extreme southeastern corner of Alabama and adjacent Florida, and would not
be hardy here. Of the other species, the so-called Mountain Magnolia, *M. Fraseri*, is the first to open its flowers in the Arboretum. It is a small tree rarely more than forty feet high, with an open head of long branches, leaves often a foot in length and deeply divided at the base, and creamy white, sweet-scented flowers eight or ten inches in diameter and very conspicuous as they stand well above the crowded leaves at the ends of the branches. This Magnolia is a native of the southern Appalachian Mountain region and, although it has not been found growing north of southeastern Virginia, is perfectly hardy in eastern Massachusetts. The next to flower is *M. cordata* which for several days has been covered with its cup-shaped, bright canary yellow flowers unlike in color those of any other Magnolia. There is an interesting story connected with this tree. It was discovered toward the end of the eighteenth century by the French botanist and traveller Michaux on one of his journeys from Charleston, South Carolina, up the valley of the Savannah River to the high Carolina Mountains. By Michaux it was introduced into French gardens where it flourished. For more than a century every attempt to rediscover this tree failed, and it is only within the last five or six years that it was found by the Berckmans Brothers growing in the woods not many miles distant from Augusta, Georgia, where plants only a few feet high flower profusely. Grafts from Michaux's trees, however, preserved this tree in cultivation, and the plants in the Arboretum were raised from grafts taken from old trees in the Harvard Botanic Garden for which they were imported from Europe probably when the Garden was laid out, that is, more than a century ago or not long after Michaux had discovered and introduced this tree. The flowers of *M. cordata* will be followed in succession by those of *M. acuminata*, the Cucumber Tree, *M. tripetala*, the Umbrella Tree, *M. glauca* and *M. macrophylla*. As they flower attention will be called to some of these trees in later issues of these Bulletins.

**Diervilla florida venusta.** Attention has been called before to the beauty of this Korean shrub. It is the first of the Diervillas to flower and for more than a week it has been covered with its large rose-pink flowers which open when the leaves are not more than half grown. It is a vigorous, perfectly hardy plant, and none of the hybrid Diervillas to which so much attention has been paid by European gardeners compare in beauty with this wild plant which is one of the commonest shrubs of central and northern Korea. The flora of Korea is not rich in trees and shrubs as compared with those of western China and Japan and not many endemic Korean plants have been established in western gardens. It is interesting, therefore, to find that five of the hardest and most beautiful shrubs introduced in recent years into gardens are from Korea. They are *Viburnum Carlesii*, *Diervilla florida venusta*, *Rhododendron Schlippenbachii*, *R. poukhanense* and *Rosa Jackii*. Korea has given us, too, a Fir in *Abies holophylla* which, although the seeds were first planted at the Arboretum in 1904, has grown so rapidly here and has proved so hardy that it promises to rival as an ornamental tree the Japanese *Abies homolepis* (*brachyphylla*). In Korea *A. holophylla* grows to a height of one hundred feet, and in the northern part of the peninsula forms pure forests often of considerable extent. In a few years it will be possible to obtain at the Arboretum a better idea than we have now of the value of the plants of Korea in this
climate, for there are growing here now seedlings of every known endemic woody plant of the central and northern part of the country. Those from the extreme southern part will not be able to bear the cold of New England winters. In addition to these recent introductions, fruits of Wilson's last journey in the orient, there are growing in the Arboretum all the trees and shrubs which, growing in the colder parts of Korea, occur also in northern Japan, eastern Siberia, Mongolia and northern China.

**Azaleas.** The flowers of two other eastern American Azaleas open their flowers before those of *Rhododendron (Azalea) Vaseyi* have faded. They are *R. canescens* and *R. nudiflorum*. These plants have rose-pink, fragrant flowers which open before or just as the leaves begin to unfold. The former is a northern plant common in some parts of southern New Hampshire and northern Massachusetts; the latter is more southern, ranging to Florida and Texas. Both these Azaleas take kindly to cultivation, and this year are covered with flowers in the Arboretum. They can be seen on Azalea Path, and there is a good mass of the northern plant on the right-hand side of the Meadow Road in front of the Lindens which makes itself known for a long distance by the exquisite fragrance of the flowers. *Rhododendron (Azalea) japonicum* is just beginning to flower. This is a hardy plant with flame-colored flowers three inches across. Less spectacular than the red-flowered *R. Kaempferi*, for many persons it is a more attractive plant and the handsomest of the Japanese Azaleas. Japanese gardeners have recently found forms of this Azalea with yellow flowers in different shades which promise to be good garden plants.

**Bush Honeysuckles.** For northern gardens there are no more beautiful plants than some of the Bush Honeysuckles, with their myriads of yellow, white, rose color or red flowers which in summer or autumn are followed by lustrous, usually scarlet fruits. Nearly all of these shrubs are able to show their greatest beauty in this climate, but this can be obtained only by planting them in rich soil and with sufficient space for free growth in all directions. In poor soil and when crowded by other plants they are usually miserable objects. The large growing kinds like the different forms of *L. tatarica*, the hybrids *L. bella* and its varieties with white and with rose-colored flowers, and *L. notha*, should be planted as isolated specimens at least twenty feet from any other plant. *L. Morrowi*, a plant of the Amoor region in eastern Siberia, requires even more space, for its lower branches which cling close to the ground naturally spread over a great area. This shrub has gray-green foliage, comparatively large white flowers and bright red fruits. It is one of the most useful of the early introductions of the Arboretum into the United States and has been largely planted in the Boston Parks. Like many other Bush Honeysuckles, *L. Morrowi* hybridizes easily with other species, and most of the plants raised from seeds, now sold by American nurserymen as *L. Morrowi*, are hybrids of this species with *L. tatarica* and are erect growing plants of little value for those who want plants with the peculiar habit of *L. Morrowi*. Among the less vigorous growing plants attention is called to two hybrids of *L. Korolkowi* in the collection, *L. amoena* and *L. Arnoldiana*. These have small gray-green foliage and small, bright pink and very attractive flowers, and are, perhaps, not surpassed in grace and beauty by any Honeysuckles in the collection.