Lilacs. The Lilac of old gardens with its purple or white fragrant flowers, hardy, long-lived, easily increased by shoots from the roots, resistant to all sorts of climate, known to every boy and girl brought up in the country, is in New England what "The May" (Crataegus) is in Old England, the best loved of all shrubs. It is loved but not respected. No one hesitates to break down a Lilac-bush for the flowers. Without the protection of special policemen the Arboretum Lilacs would be exterminated in a day. It is impossible to protect Lilac flowers in public parks and city squares, and every year city hawkers in search of them extend their depredations further into the suburbs; and in Lilac season automobiles loaded with stolen mutilated Lilac branches covered with wilted flowers are common objects along all the roads leading into Boston.

The first Lilac to get a place in European gardens was the plant which only slightly modified is still to be found growing in the neighborhood of many old New England farm-houses. This plant (Syringa vulgaris) reached western Europe in 1597 by the way of Constantinople and Vienna. It was long believed to have come originally from Persia and it is only in comparatively recent years that it has been known that this Lilac was a native of the mountain forests of Bulgaria. Plants raised at the Arboretum from seeds of the wild Bulgarian plants are growing with the other Lilacs in the collection, and it is interesting to compare the flowers of the wild type with those which cultivators have produced in the last half century. Another Lilac, the so-called Persian Lilac (Syringa persica), a native of the region from
the Caucasus to Afghanistan, was known in England as early as 1658. This is a smaller plant than the common Lilac, with slender stems, narrower leaves, and smaller but very fragrant flowers. The flowers are pale lilac color but there is a form with nearly white flowers, and one on which the leaves are deeply divided (var. laciniata). The Persian Lilac blooms usually ten days later than the common Lilac and is a beautiful garden plant, but is probably less often cultivated than it was a century ago. It is of particular interest, however, as one of the parents of the first hybrid Lilac, the other being Syringa vulgaris. This hybrid appeared in the Botanic Garden at Rouen, France, early in the nineteenth century and through a mistaken idea of its origin was named Syringa chinensis. It is sometimes called Syringa rothomagensis. This hybrid is one of the most valuable of all Lilacs. It grows quickly to a large size; it is very hardy and blooms freely every year. In shape the leaves resemble those of the Persian Lilac but are broader; the flowers, too, recall those of the Persian Lilac, but they are larger and are produced in long massive clusters sometimes nearly two feet in length, and so heavy that the slender branches do not well support them. The flowers are reddish purple but there are forms with darker red flowers and with nearly white flowers.

In a recent issue of *The Garden Magazine*, Mr. Theodore A. Havemeyer describes the development of the modern Lilacs, which, according to him, date from 1843, no mention in his paper being made of Syringa chinensis. In 1843 a nurseryman at Liege, in Belgium, produced a Lilac with small double flowers. Nothing is said of its parentage, but as it was called Syringa vulgaris flore pleno Liberti, and later Syringa vulgaris azurea plena, it was probably a seedling of the common Lilac and not a hybrid. This plant is not in the Arboretum collection, and if it is known to any reader of this Bulletin the Arboretum will be glad to hear from him, for although it probably has little to recommend it as an ornamental plant this Lilac has historical interest and for that reason should find a place in the Arboretum collection. It was this plant that Lemoine, the French hybridizer, selected as the seed-bearing parent in his first attempt to improve the garden Lilacs, fertilizing the flowers with pollen of the handsomest varieties of the common Lilac of that day and of a Chinese species, Syringa oblata, which had been found by Fortune in a Shanghai garden and sent by him to England nearly sixty years ago. This Chinese Lilac is distinguished from all other Lilacs by the broad, thick, lustrous leaves which turn deep wine color in the autumn. The flowers are light lilac color, exceptionally fragrant, and are borne in short, compact clusters. This is one of the earliest Lilacs to bloom here, but unfortunately the flower-buds are often injured or destroyed by late frosts. For this reason, although the flowers are not surpassed in color and fragrance by those of many Lilacs, this plant cannot be recommended for general cultivation in this part of the country.

The crossing of Syringa oblata and S. vulgaris azurea plena produced a plant which has been called Syringa hyacinthiflora. This is a vigorous shapely shrub with leaves the shape of those of its Chinese par-
ent, which turns reddish in autumn but without the brilliant colors of the Chinese plant. The flowers are small and double, in small clusters, bluish lilac and as fragrant as those of _S. oblata_. This plant is interesting as the second of the four species-hybrids of Lilacs which are now known, and valuable for its very early fragrant flowers. It has probably played, too, an important part in the improvement of the double-flowered forms of the common Lilac which have been produced in recent years by Lemoine and other European nurseries. _Syringa hyacinthiflora_ is not often found in American gardens, but it is well established in the Arboretum collection.

By fertilizing the flowers of _Syringa vulgaris azurea plena_ with the varieties of the common Lilac Lemoine produced the first important double-flowered Lilacs, _S. Lemoinei_ and others, and by again crossing these with improved forms of the common Lilac the double-flowered Lilacs of recent years have been made. By the crossing of varieties and by careful selection the flowers of the common Lilac have been gradually changed in size and in color in the last thirty years, but unfortunately the flowers of some modern Lilacs have lost a good deal of the fragrance of the old-fashioned Lilac, which, once enjoyed, is never forgotten. There are too many varieties of the common Lilac now cultivated. Some of them with different names given to seedlings in different nurseries and often in different countries are identical, and others are so much alike that they can only be distinguished by close comparison. There are more than two hundred of these named varieties of _Syringa vulgaris_ now in cultivation. It is important to cultivate them all in the Arboretum for study and comparison, but in a private garden everything that is best in the forms of _Syringa vulgaris_ can be found in not over a dozen of the single-flowered and a dozen of the double-flowered forms. The Arboretum does not undertake to name the twenty-four best varieties. The selection must be left to the person who is going to plant them, for no two persons agree about Lilac flowers. There are between one hundred and sixty and one hundred and seventy named varieties of this Lilac in the Arboretum collection. The flowers are fast-opening, and the best way for persons living in the neighborhood of Boston to make their selection is to study the Arboretum collection, and make notes on the color and size of the flowers and the size and shape of the flower-clusters.

In planting Lilacs it must be remembered that plants on their own roots are superior to those which have been grafted on other varieties of the common Lilac, for Lilacs produce many root-suckers. These often grow vigorously, so that a person who buys a fine named variety may in a few years find that the suckers from the root on which it was grafted have overpowered and killed his named variety, or that he has a bush producing on different branches flowers of his original purchase and of the stock. Nurserymen also use the Privet as a stock on which to graft Lilacs. But Lilacs should never be grafted. Although they can be propagated in winter by cuttings of hard wood, the best way is to make soft wood cuttings in late June or early July.
nurserymen rarely adopt this method for it takes a little longer to produce saleable plants than it does by grafting, but the plants on their own roots are so much more valuable than grafted plants that no one should ever buy a grafted Lilac.

*Syringa pinnatifolia* is one of the Lilacs discovered by Wilson in western China which has flowered this year for the first time in the Arboretum. The small nearly white flowers in small short clusters opened ten days ago; they are less beautiful than those of almost any other Lilac, but the plant is of considerable interest, as it is the only Lilac with pinnate leaves. It is with the other Chinese Lilacs on the path at the top of the bank on the left-hand side of the Bussey Hill Road occupied by the Lilac Collection.

**Rhododendron (Azalea) Kaempferi.** Plants of this handsome red-flowered Japanese Azalea on Azalea Path where they are fully exposed to the sun have been in flower for a week, although plants in the shade on the northern side of Hemlock Hill will not open their flowers for several days. The flowers are very delicate and are easily injured by the sun, and it is best to plant this shrub among trees in partial shade or on the northern side of conifers. This Azalea has been growing in the Arboretum for more than twenty years and is perfectly hardy in eastern Massachusetts. Late in May or early in June no other shrub makes a more brilliant show of color.

**Buckeyes.** The first of the Horsechestnuts, or Buckeyes as the species of eastern North America are called, to flower this year is the form of the Ohio Buckeye (*Aesculus glabra*) from northwestern Missouri, the variety Buckleyi with leaves composed of seven instead of five leaflets. It was followed in a few days by the flowers of the normal tree. The Ohio Buckeye is a comparatively small tree which begins to flower when less than ten feet high, and the clusters of small yellow or greenish yellow flowers are not showy. It is interesting as the only American species with prickly fruit like that of the Old World Horsechestnuts. Different Buckeyes and Horsechestnuts will be in bloom for several weeks and among them are some of the handsomest of flowering trees. The Aesculus Collection is a large one and has been arranged next to the Lindens on the right-hand side of the Meadow Road.

An illustrated guide to the Arboretum containing a map showing the position of the different groups of plants has been published. It will be found useful to persons unfamiliar with the Arboretum. Copies of this guide can be obtained at the Administration Building in the Arboretum, from the Secretary of the Massachusetts Horticultural Society, 300 Massachusetts Avenue, Boston, from The Houghton, Mifflin Company, 4 Park Street, Boston, and at the office of the Harvard Alumni Bulletin, 18 Plympton Street, Cambridge. Price, 30 cents.