Summer-flowering Trees. Several interesting trees will flower in the Arboretum at different times during the next two months. Among these summer-flowering trees are the Chinese Sophora japonica, the Maackia of eastern Siberia, Acanthopanax ricinifolius from northern Japan, the arborescent Aralias from the southern United States and eastern Asia, the Korean and Chinese Evodias, the Sour Wood or Oxydendrum from our Southern States, the Chinese Koelreuteria and one of the American Catalpas (C. bignonoides). It is interesting that only three of these trees, one of the Aralias, the Sour Wood and the Catalpa are American, and that the others have been brought to this country from eastern Asia. The most important group, however, of summer-flowering trees is

The Lindens. The flowers of a few of the early flowering species of these trees, like the European Tilia platyphyllos and its varieties, and T. vulgaris, and the American T. neglecta, are already open; and during the next two or three weeks the flowers of different species of Linden-trees will open in the Arboretum and attract the bees to their richest harvest. Linden-trees are very generally distributed in all the temperate regions of the northern hemisphere with the exception of western North America and, in addition to numerous species, several hybrids are cultivated. All the species are very similar in flower and fruit, and chiefly vary in the size and shape of the leaves, in the presence or absence of hairs on the leaves and branchlets, and in the nature of their hairy covering when it occurs. A fact which is not easy to explain is the presence in the flowers of all the American species of
petal-like scales opposite the petals and connected with the clusters of stamens, while in the flowers of all the Old World Lindens such scales do not exist. Another fact about Lindens which is not easy to explain is that the European species grow much better in Massachusetts than the species of eastern Asia, although as a rule European trees do not succeed here as well as the trees of eastern Asia. The five European Lindens and the species from the Caucasus all flourish in the Arboretum and some of these trees have grown in New England to a large size. The Asiatic species, however, although they have not been many years in this country, give little promise of becoming really good trees here. *Tilia japonica*, which has been growing in the Arboretum for twenty-five years, although still a small tree, is, however, perfectly healthy; it is related to the small-leaved Linden of Europe (*T. cordata*) and, like that tree, is one of the latest Lindens to flower here. The graceful drooping branches and pale under surface of the leaves make this small tree attractive, and it is the first of the Lindens here to unfold its leaves in the spring. The common Linden of the north (*T. glabra* or *americana*) as was recently explained in one of these Bulletins, is not as good a tree here as several of the European species, but there are several other American Lindens which have been overlooked by American planters, and misunderstood or neglected by American botanists, and among them are handsome trees. Some of these are growing in the Arboretum, and it is not improbable that the Arboretum collection will be improved at the end of a few years when it is hoped the American Lindens will be better known.

Lindens have always been more valued as ornamental and shade trees in Europe than in the United States. No other trees have been more generally planted in some of the countries of central Europe, and in these countries attention has been paid to the collection and perpetuation of several interesting and valuable varieties and hybrids. The Arboretum collection, which is arranged in the meadow on the right-hand side of the Meadow Road, now contains forty-five species, varieties and hybrids. Many of these trees have flowered for several years, and some of them are large enough to show the habit of the different species when thirty or forty years old. Judging by the Arboretum collection, the handsomest of these trees which can be grown in this part of the country are the European *T. vulgaris*, *T. cordata*, *T. tomentosa*, and *T. petiolaris* and the American *T. heterophylla*, *T. Michauxii* and *T. neglecta*, and the hybrid *T. spectabilis*. This tree is believed to be a hybrid of *T. americana* with *T. petiolaris* or *T. tomentosa*. It has leaves as large as those of the American tree but silvery white on the lower surface. The variety *Moitkei* has rather thicker but equally large leaves. These trees are among the handsomest of all Lindens, and no Lindens in the Arboretum collection grow more rapidly.

Some good shrubs. A correspondent asks the Bulletin to name the twelve best shrubs of recent introduction. The task is not an easy one for two persons rarely agree in their opinion of the merits of any plant for any particular purpose. The best shrubs in the sense which our correspondent means are those which will be hardy over a large
part of New England and the middle and middle western states, that is in those parts of eastern North America where gardening is most practiced. This means that Rhododendrons, Azaleas and other plants of the Heath Family must be excluded from the list, for plants of this family will not grow in soil impregnated with lime. The selection is more difficult now than it would have been a year ago, for the past winter has hurt some of the shrubs which might have been included in such a list but which have not been able to support the excessive cold to be expected occasionally in the northeastern states. As they were uninjured by the cold of last winter the following twelve shrubs may at least be considered hardy whether all our readers approve or not of our selection. In our opinion four of the Cotoneasters of western China must be included in any list of the twelve best shrubs of recent introduction; they are *C. hupehensis*, *C. multiflora var. calocarpa*, *C. racemiflora var. soongorica*, and *C. nitens*. *C. hupehensis* is a broad, tall and shapely shrub with bright green leaves and white flowers which make the plant as conspicuous as any Spiraea. The flowers are followed by small scarlet fruits which are a good deal hidden by the leaves. *C. multiflora var. calocarpa* is a large shrub with slender, gracefully arching stems, and blue-green leaves. The flowers are borne in erect clusters on short lateral branchlets which rise above the arching stems, and few shrubs are more graceful in habit or more charming in the arrangement of their flowers; the fruit is scarlet and about a quarter of an inch in diameter. *C. racemiflora var. soongorica* is also a large and vigorous shrub with arching stems. The flowers are white and a little larger than those of *C. hupehensis*; the leaves are dull blue-green in color, and the fruit is large and showy. Many persons consider this the handsomest of the Chinese Cotoneasters. *C. nitens* is also a large broad shrub; the leaves are dark green and very lustrous; the flowers are red, and the fruit is black. Of these four Cotoneasters the last has the handsomest foliage but the smallest flowers and fruit.

Two Roses can properly find a place in this list of twelve shrubs, the Chinese *Rosa Hugonis* and the Korean *R. Jackii*. The former has pale yellow flowers and has often been described in these Bulletins; it is one of the handsomest of all single-flowering Roses and one of the most important introductions of recent years. *Rosa Jackii* bears clusters of white flowers like those of *R. multiflora*, but the flowers are nearly twice as large and open two or three weeks later. This is one of the last of the Roses to flower here and is now in bloom in the Shrub Collection.

Two Lilacs recently described in these Bulletins, can be included in the list, *Syringa Sweginzowii* from northern China and *S. reflexa* from western China. *Diervilla florida var. venusta*, introduced a few years ago from Korea, is perfectly hardy and the handsomest of all the species, varieties and hybrids of Diervilla in the large Arboretum collection. It can fairly be considered one of the best shrubs introduced into this country by the Arboretum in recent years. *Prinsepia sinensis* from northern China properly finds a place in this list. It is perfectly hardy; the leaves unfold earlier in the spring than those of any other
shrub in the Arboretum and are soon followed every year by innumerable yellow flowers. The hardiness, rapid growth, sturdiness and the abundant spines on the stems should make this a good hedge plant.

Of the numerous species of the genus Corylopsis cultivated in the Arboretum only the Japanese *C. Gotoana* escaped serious injury last winter. Like all the species of this genus, it bears drooping clusters of yellow flowers which appear before the leaves, which resemble those of the Witch Hazel to which Corylopsis is related. This beautiful shrub has flowered here now for several years and has shown itself worthy of a place among the best plants of recent introduction.

The list can be completed with *Aesculus georgiana* and *Spiraea Veitchii*. The former is a dwarf Buckeye from central Georgia, with compact clusters of large red and yellow flowers. This shrub was introduced into gardens by the Arboretum and has now flowered here for several years. As it was not injured by the cold of last winter it can probably be considered hardy in Massachusetts. *Spiraea Veitchii* is one of the plants discovered by Wilson in western China. It is a large shrub sometimes ten or twelve feet high, with gracefully arching stems above which the wide clusters of white flowers stand at the ends of short lateral branchlets. It is one of the latest of the white-flowered Spiraeas to bloom and is now in flower in the Arboretum where it has proved entirely hardy.

The fruits of *Acer tataricum* are already bright red and make this little tree a conspicuous and attractive object. The bright blue fruits of *Lonicera coerulea* and its numerous geographical varieties, and the scarlet, red and yellow fruits of the Tartarian Honeysuckle and its varieties and hybrids are now ripe. And from now until March persons interested in the handsome fruits of trees and shrubs can find them in great variety in the Arboretum.

With this issue these Bulletins will now be discontinued until the autumn.