Hybrid Lilacs. In the last issue of these Bulletins an account was given of Syringa chinensis, the first hybrid Lilac of which there is a record. The next hybrid of which there is a history, Syringa hyacinthiflora, was made by Lemoine of Nancy in 1859 by crossing S. oblata with S. vulgaris coerulea plena the first of the double-flowering forms of the common Syringa vulgaris. S. oblata, the first of the Chinese Lilacs with the exception of Syringa persica to reach Europe from China was found probably in a Shanghai garden by Fortune and sent by him to England in 1852; from England it reached the United States as early as 1869 and perhaps earlier. It is a large, round-topped shrub, with broad, heart-shaped leaves which unlike those of other Lilacs are thick and coriaceous and in the autumn turn scarlet. It is one of the first Lilacs to bloom in the spring here and the large violet-colored flowers in comparatively small clusters are extremely fragrant. In severe winters the flower-buds are sometimes injured. It is interesting that this handsome plant has not yet been found growing wild; and there is no record here that it has been seen by anyone in China since Fortune's time. The first flowers of the hybrid Syringa hyacinthiflora opened this year on May 2 and were still in good condition on May 20th. It is a large, round-topped shrub of excellent habit, with leaves resembling in shape those of S. oblata but not thicker than those of the common Lilac, and small clusters of small semi-double, extremely fragrant flowers. Interesting from its origin S. hyacinthiflora is the least valuable of the hybrid Lilacs as a garden plant. The fact, however, is interesting that it is usually the first Lilac to flower in the Arboretum collection.
Syringa Henryi, the general name which has been given to the third of the hybrid Lilacs, was obtained by the skilful French gardener L. Henry by crossing the Hungarian S. Josikaea with narrow leaves and small bluish-purple flowers in long narrow clusters with S. villosa with its large leaves and ample clusters of flesh-colored flowers. These are both late-flowering species as is the hybrid made from them. Plants of this hybrid are large, vigorous, perfectly hardy and grow rapidly. The leaves resemble those of S. villosa but the flowers are violet-purple or reddish purple and arranged in clusters from twelve to fifteen inches long and broad. The handsomest perhaps of this race, which has been named "Lutèce," has deep violet-purple flowers and is one of the most beautiful of all Lilacs. "Eximia," another of the hybrids, has not grown here to such a large size as "Lutèce" but it is one of the handsome late-flowering plants in the collection, with compact clusters of rose-colored or reddish flowers which become pink after opening.

Lemoine has obtained another interesting hybrid Lilac by crossing forms of Syringa vulgaris with the violet-flowered form (var. Giraldii) of the north China S. affinis. The plants of this parentage grow rapidly and are tall, narrow shrubs. Like their Chinese parent they bloom early and the flowers are fragrant. The best known of these hybrids have been called by Lemoine "Berryer," "Claude Bernard," "Lamartine," "Mirabeau," "Pascale," and "Vauban." Several of these have been flowering in the Arboretum during the past ten days and promise to be important additions to the collection. Lemoine's latest hybrid Lilac has been obtained by crossing the hybrid "Lutèce" with the Chinese S. tomentella. Lemoine speaks highly of this plant which has not yet reached the Arboretum.

Late Shad Bushes. The last of these plants to flower in the Arboretum are the American Amelanchier sanguinea and A. amabilis and the two old world species A. vulgaris and A. asiatica, which were all in good bloom on the 20th of May. A. sanguinea is a slender shrub sometimes 6 or 7 feet high and does not spread by stoloniferous stems or from colonies. The leaves, which appear before the flowers open, are oval to oblong-oval, pale green and often somewhat glaucous, the upper ones nearly erect. The large and showy flowers are produced in many-flowered, flexuous or drooping racemes sometimes nearly five inches in length. The fruit, which ripens in August or September, is almost black, covered with a glaucous bloom, sweet, juicy and of a pleasant flavor. This beautiful shrub grows in dry, rocky or gravelly soil and is widely distributed from eastern, northern and central Maine, through Vermont and western Massachusetts to Quebec, Ontario and Michigan and south, through New York and along the Appalachian Mountains to Alabama. Amelanchier amabilis, which was once considered a variety of A. sanguinea, differs chiefly from that species in its larger and even more beautiful flowers. It is less widely distributed than A. sanguinea, having been found only from the neighborhood of Cooperstown in Otsego County, New York, in central and eastern New York and in Ontario. A handsome plant, it is less beautiful when in flower than the hybrid between the two arborescent species, A. canadensis and A. laevis, now known as A. grandiflora, which when in flower is the most beautiful of the Shad Bushes which grow in the
Arboretum. The two old world species are geographically interesting but have less value as garden plants than most of the American Shad Bushes.

Hawthorns. There have not before been as many species of Hawthorns in bloom in the Arboretum as there are this week as many of the plants which have been raised here from seed since 1900 and planted on the eastern slopes of Peters Hill are flowering this year for the first time. Many of these trees are covered with flowers and the older and larger plants are all flowering while many of the Crabapples and Lilacs this year have flowered sparingly or not at all. Judging by the appearance of the Hawthorns this year it looks as if at the end of four or five years more the flowering of these plants would be the great flower event of the Arboretum year. That many of these plants can be improved at least in habit by good cultivation and skilful pruning appears this year in some of the Tenuifoliae species which grow naturally as small shrubs with numerous stems but have become here small, symmetrical, single-stemmed trees. Two good examples of this change of habit can be seen in Crataegus Forbesæ and C. pastorum, two species from Worcester County, Massachusetts, now in flower on Peters Hill. Judging by these two plants it is possible that nearly all the shrubby species can be grown, with the exception of some of the species of the Intricatae Group, in good soil into small trees. As usual Crataegus nigra was the first Hawthorn in the collection to open its flowers. This native of western Europe is a shapely tree with pale bark and large deeply lobed leaves. The flowers, which are arranged in compact clusters, have twenty stamens with anthers faintly tinged with pink, and are followed by handsome black lustrous fruits, which ripen in summer and give greater value to this tree than the flowers which are less beautiful than those of many of the American Hawthorns. The flowers of Crataegus nigra have soon been followed by those of several trees of the Molles Group like C. arnoldiana, C. mollis, C. submollis, C. Ellwangeriana, C. champlainensis, and C. Treleasei; these have been soon followed by C. pedicellata, C. Pringlei, C. lobulata, C. diatata, C. prunosa, and C. sertata. During the next two weeks lovers of Hawthorns will be able to see the flowers of more than two hundred species, and there will be Hawthorns flowering in the Arboretum now continually until July; by the middle or end of August the fruit of a few of the species will be ripe.

Daphne genkwa is a shrub with slender stems sometimes three or four feet high, and in its native country sometimes spreading by root-suckers; the leaves are pointed, from one to two inches long, and covered below with pale, silky hairs; the lilac-blue flowers are produced in April and May in stalked clusters from the joints of the naked wood of previous years. The long, slender wands of bloom and the unusual color of the flowers among early flowering shrubs make this Daphne an exceptionally attractive garden plant. A native of central China it appears to have been early carried to Japan where it was first found by Von Siebold. It was introduced into England in 1842 by Fortune, probably from a Shanghai garden. Twenty years later plants were sent from Japan by Thomas Hogg to the Parsons Nursery at Flushing, Long
Island. One of these Japanese plants flowered in the Arboretum in 1880, but generally they have never grown well in this country and it is doubtful if any of them are now in existence. In 1900 Wilson found this Daphne growing wild near Ichang in Hupeh and plants from his seeds were grown at the Arboretum. Some of these were killed by the severe winter of three or four years ago but the remnant of one of them has been flowering this year on Hickory Path near Centre Street. It is, however, probable that this beautiful shrub will never be a permanent success in eastern Massachusetts. A few plants have been sent by the Arboretum to more southern gardens where they are growing well and have given great satisfaction. *Daphne genkwa* is now extremely rare in the United States and every one with a plant should save all the seeds it produces, for Daphnes can only be successfully obtained from seeds, as it is practically impossible to increase them from cuttings.

**Berberis Dielsiana** is now in flower with the new Chinese Barberries on Bussey Hill. It is a magnificent plant already nearly ten feet high and from eight to ten feet in diameter with wide spreading slightly pendulous branches. The flowers are in drooping racemes like those of the common Barberry and are equally fragrant. *Berberis Dielsiana* is one of Purdom's discoveries, who found it in Shensi and among the new Barberries is only surpassed here as an ornamental plant by *B. Vernae* another of Purdom's discoveries which will not be in bloom yet for two or three weeks. Two years ago *Berberis Dielsiana* opened its flowers as early as the middle of April, but the middle of May seems to be the normal time for it to flower here, and that is before any of the other species of this group are in bloom.