Arnold Arboretum Hybrids. Except with Roses, no attempt has been made at the Arboretum to produce hybrid trees or shrubs. Several hybrids, however, have appeared here from time to time, and the following, of which descriptions have been published, or will be published, are now well established here. Such hybrids are always interesting, and among those which have appeared in the Arboretum are a few which are more valuable than their parents, and in two instances at least the handsomest garden plants in the genera to which their parents belong. The Arboretum hybrids are Pterocarya Rehderiana, Sorbus arnoldiana, Forsythia intermedia primulina, Malus arnoldiana, Malus rubrijarta, Malus Dawsoniana, Prunus arnoldiana, Pyrus congesta, Cornus arnoldiana, Betula Jackii, Viburnum Jackii, Berberis notabilis, Lonicera amoena arnoldiana, and Aesculus Harbisonii. Another Barberry, Berberis ottawensis, believed to be a hybrid of Berberis Thunbergii and B. vulgaris, which was first described from a plant in the Arboretum connected with the Dominion Experimental Farm at Ottawa, has appeared several times among seedlings in this Arboretum where it has proved to be a handsome and distinct plant. There is a large specimen of this hybrid on the right-hand side of the entrance to Azalea Path from the Bussey Hill Road. The most valuable of the Arboretum hybrids for general cultivation in this part of the world are Pterocarya Rehderiana, Malus arnoldiana and Sorbus arnoldiana. The Pterocarya, which is evidently a hybrid of the Caucasian P. fraxinifolia and the Chinese P. stenoptera, is much hardier than its parents and has grown more rapidly in the Arboretum than any of the species of this interesting genus of the Walnut Family. Several of these hybrid plants appeared here in 1879 from seeds sent from the Arboretum Segrezianum in France as seeds of P. stenoptera, so that although the plants were raised here the crossing of the two species occurred in France. The grove of these trees which shades a stretch of Hickory Path near Centre Street is one of the most interesting and attractive groups in the Arboretum. The trees send up many suckers from the roots and for several years have flowered freely and produced fruit. This hybrid is an important addition to the number of interesting and handsome trees which can be successfully grown in this climate. Sorbus arnoldiana, which appeared here in 1907 among seedlings of Chinese Sorbus discolor, is a fast-growing, vigorous tree already nearly twenty feet tall, with smooth, lustrous, yellow-gray bark, erect branches forming a broad compact symmetrical head, leaves with the narrow leaflets of Sorbus discolor, and the compact, slightly convex flower-clusters of Sorbus Aucuparia, as broad as those of S. discolor. The fruit is pink and in color unlike that of any of the species of Sorbus. This hybrid is the handsomest Mountain Ash in the collection where it has grown more rapidly than most of the species of the genus; and there now seems to be every reason to hope that it has enabled the Arboretum to add to the list of ornamental plants hardy in New England another tree as valuable as Malus arnoldiana. This tree, which appeared in the Arboretum many years ago, has been so often noticed in these Bulletins that it is not necessary now to do more than to repeat the fact that it is probably a hybrid of Malus floribunda and some other Asiatic Crabapple, probably one of the hybrids of Malus baccata; and that, in the judgment of many persons, it is the hand-
somest Crabapple now cultivated. *Malus rubrifolia* is the name which will be given to the hybrid Crabapple recently mentioned in Bulletin No. 5 of this volume. It finds a place in the list of Arboretum hybrids because it is now known that it was either raised from seeds gathered in the Arboretum or that it was a seedling pulled up from the neighborhood of the Arboretum plants of *Malus Niedzwetzkyana*. These Arboretum hybrids show that new plants may appear spontaneously in any large collection of cultivated plants, that such spontaneous hybrids are sometimes valuable and that others, although interesting, can add little or nothing to the beauty of gardens. They show, too, that if the fertilization of the flowers of one plant by the pollen from the flowers of a different species or hybrid can produce such results as *Sorbus arnoldiana* and *Malus arnoldiana*, systematic and intelligently directed hybridization might with the abundant material here produce plants more beautiful than any now known in our gardens.

**Rhododendrons.** The severe winter has not killed any of the plants in the Arboretum collection, but many Rhododendron branches have been broken by the weight of snow and ice, and the flower-buds of a few of the hybrids have been injured. The southern Appalachian *R. carolinianum* was the first species to open its buds this year and for the last ten days the plants have been covered with their small, rose-colored flowers. Almost as early were some of the forms or hybrids of *R. caucasicum*. The most satisfactory of these for general cultivation in this climate is probably “Boule de Neige,” which is a dwarf round-headed plant with good foliage and dark green leaves. It is perfectly hardy and rarely fails to flower. “Mont Blanc” is another of these plants which can be depended on to give satisfaction. As it grows in the Arboretum it is a dwarfer plant than “Boule de Neige,” but the clusters of flowers and the flowers are larger; the flowers when the buds first open are rose color but soon become white. There are other named hybrids of *R. caucasicum* in the collection, but there is still much for us in this country to learn about the origin, correct names and hardiness of this race of Rhododendrons. The flower-buds of the Caucasian *R. Smirnowii* were uninjured by the winter and the plants are covered with the handsome pink flowers which make this one of the desirable Rhododendrons for Massachusetts gardens. Hybrids of this plant raised in England which are hardy in the Arboretum have lost their flower-buds, but those of a hybrid of the Japanese *R. Metternichii*, a species which grows badly here, with one of the hybrids of *R. catawbiense*, also raised in England a few years ago, are uninjured. The flower-buds of the two dwarf hybrids, *R. myrtifolium* and *R. arbutifolium*, useful plants to border beds of larger growing broad-leaved evergreen shrubs, are covered with uninjured flower-buds. The Rhododendrons most commonly found in American gardens are hybrids of *R. catawbiense* of the southern United States, and the first of them to flower here, *R. catawbiense album* has been in bloom for several days. One of this race called “Bismarck,” which came to the Arboretum from Dresden, also flowers early and is unusually handsome this year. The largest number of Rhododendrons will probably be in bloom on Saturday and Sunday, the 12th and 13th of June. The collection is at the base of Hemlock Hill close to the entrance to the Arboretum from South Street. This entrance is most easily reached from Forest Hills by following South Street past the Bussey Institution.