# ARNOLD ARBORETUM

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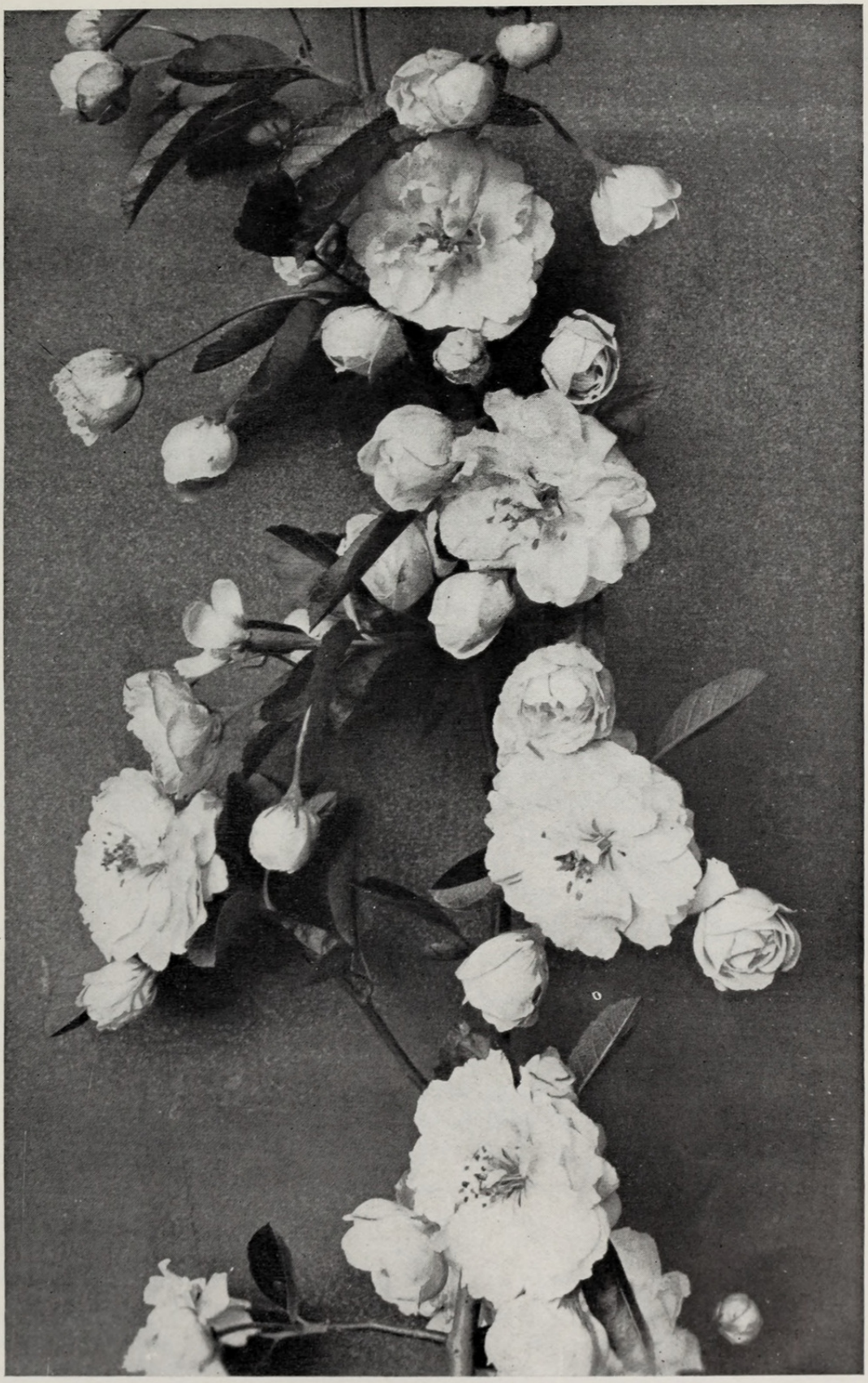
**American Crabapples.** In the Arboretum, following the Cherries, the Flowering Crabapples are the plants of dominant popular interest, overlapping and connecting late cherry blossom and lilac times. They passed through the winter in good condition and during the last two weeks have been conspicuous by their abundance of beautiful flowers. The first trees to blossom opened their flowers about May 3rd. These earliest flowering apples belong to several species and named forms or hybrids that originated in the Old World. They have a season of inflorescence coincident with that of most of the varieties of our cultivated common Apple, the *Malus pumila* of our orchards, a species now found naturalized in pastures and woods although a native of Europe and western Asia. The many kinds of common Apple show a marked variation in time of flowering. As a rule those with early ripening fruits, like "Early Harvest", "Astrachan", etc., open their flowers with the earliest of the ornamental Japanese and Chinese Crabapples, while some varieties that mature their fruit late in the season correspond in flowering time with the later, showy flowering species from the Orient. Noticeably later flowering than the Crabapples of the Old World are those species which are indigenous to eastern and central North America. This is a group which cannot be separated by any tangible differences in aspect or foliage recognizable by the casual observer, and yet is so distinct botanically that at a glance the botanist is usually able to pick out trees of American origin, even without seeing the fruit whose structure, the core being free at the apex, is quite distinct from that of all other species.

By following the proper procedure, as outlined by Professor Sax in the last Bulletin, the Old World and the New World species may be, and have been, hybridized with some very interesting results. But the act of bringing these species together or in close proximity has allowed Nature to develop an intermixture without help or interference by man. While some are already known, we are yet on the threshold of these foreign and native mixtures and a century hence there is certain to

have been developed races of trees of horticultural interest very different from those we know at the present day.

The name "Crabapple" has come to be associated, in the average mind, with trees bearing small fruit, but some of our American species produce fruits three inches in diameter. These fruits have sometimes been used in making preserves, jellies, or cider, but many are astringent and are considered rather unpalatable and of poor quality when judged with regard to their eating or culinary purposes. Undoubtedly they will be greatly improved in future years when they will have become mixed with the best fruiting types of the Old World species now in cultivation. At the present time they are chiefly valued and cultivated for their usually pink or rosy-colored, deliciously fragrant flowers. There are a number of species in cultivation, all characterized by having pink, fragrant flowers, and fruits which often have a sticky or waxy covering and give off a strong, sweet, aromatic fragrance when fully mature in the Autumn. Not one of these species of eastern North American Crabapples is found native within the limits of the New England States, but they may be found from western New York southward to Florida and westward to Nebraska, Iowa, Kansas and eastern Texas. All of the wild apple trees found in our New England woods and pastures and along our waysides are escapes from long cultivated orchards of varieties of *Malus pumila*, which has also been known as *Malus Malus*. Linnaeus placed Apples and Pears in the genus *Pyrus* but in the Arboretum that generic name is now restricted to the Pears, while his *Pyrus Malus* (the Apple) became *Malus Malus* in some botanical lists.

By the action of man in introducing foreigners or outsiders into our flora, the future holds a prospect of a wonderful tangle of curious Apples and Crabapples whose parentage it will not be easy to trace. Already we have in cultivation interesting hybrids of the Iowa Crabapple, *Malus ioensis*, and the common cultivated Apple. One of the best known of these is the Soulard Crabapple, *Malus Soulardi*, which shows considerable variation but is usually characterized by having dense clusters of short pedicelled flowers, pink and white in color, which give off a pleasant, sweet, violet-like fragrance. It has been found in various states in the Mississippi Valley, from Minnesota to Texas, and is usually regarded as of the hybrid origin already suggested. The fruits are sweet-scented and often two inches in diameter. While *Malus ioensis* is interesting in itself and through the supposed hybrids which have been developed from it, its great fame rests on the fact that it is the mother of the beautiful semi-double or double flowered variation known as the Bechtel Crab, *Malus ioensis plena*, which has also been described in horticultural literature and listed in catalogues as *Malus* (or *Pyrus*) *angustifolia flore pleno*. In the English "Gardeners' Chronicle" it was called a Pear, under the synonym *Pyrus coronaria flore pleno*. *Pyrus coronaria* formerly was made to include a number of what are now considered distinct species of American Crabapples. This double-flowered form of *Malus ioensis* is said to have been found nearly 100 years ago, or before 1840, but it is not known to have been formally introduced into general cultivation until 1888, and was not brought into the Arnold Arboretum collection until



MALUS IOENSIS PLENA

Photographed in the Arnold Arboretum, May 26, 1931,
by Professor Oakes Ames