Attention is called in this Bulletin to a number of plants which are beautiful in the autumn from the brilliant color of their leaves and which are not generally cultivated in New England.

One of the most brilliant of all trees in autumn here is the Liquidamber or Sweet Gum (Liquidambar Styraciflua). This eastern American tree grows as far north as southern Connecticut and in the south, especially in the maritime region of the southern Atlantic states, and in the lower Mississippi valley it is one of the commonest of the trees of the forests on the bottom-lands of rivers where it sometimes grows to the height of more than one hundred and fifty feet. It is a tree with a tall straight trunk and short branches which form a narrow pyramidal head and are furnished for several years on their upper side with broad corky wings. The flowers and the fruit are not conspicuous, and the great beauty of this tree is found in its habit and in the leaves; these hang on long stalks and are generally rounded in outline with a square or slightly heart-shaped base and are deeply five- to seven-lobed, the lobes being acutely pointed. The leaves are thin and very lustrous on the upper surface and in autumn turn deep crimson. There is a species of Liquidamber in southwestern Asia which produces the Liquidamber of commerce, another in Central America, and two Chinese species. The two Chinese species are both growing in the Arboretum and there is a probability that one of these, L. formosana, will prove hardy here. This is the tree which produces much of the wood used for Chinese tea-boxes. There are several individuals of the American Liquidamber in the Arboretum, the two largest specimens being in the Witch Hazel group near the junction of the Meadow and Bussey Hill Roads.

The Sour-wood or Sorrel-tree, Oxydendrum arboreum, is another American tree which is too rarely found in cultivation. It is the only representative of the genus which belongs to the Heath Family, and in favorable surroundings on the Appalachian Mountains sometimes becomes fifty or sixty feet tall. It is, however, much smaller in cultivation at the north and begins to flower when only a few feet high. This tree owes its common name to the acid juices of the leaves which protect them from insects and this adds to its value. It is valuable, too, because the white flowers, erect on the drooping branches of large clusters terminal on axillary branches of the year, do not appear until midsummer when few woody plants are in flower and because the leaves in autumn turn bright scarlet in striking contrast to the clusters of white, dry, pointed, capsular fruits. This southern tree is perfectly hardy in New England where it should be more generally planted. There is a group of the Sour-wood among the Laurels at the base of Hemlock Hill.

Better known in this part of the country than the Liquidamber and the Sorrel-tree, the Flowering Dogwood (Cornus florida) might well be planted more generally than it has been, for there is no more beautiful inhabitant of the woods of eastern North America. The inflorescence, with its pure white floral bracts which appear before the leaves unfold, lights up the forests in early spring and in the autumn when
the clusters of shining scarlet fruits are ripe and the leaves have
turned scarlet no other small tree is more beautiful here.

The leaves of the Scarlet Oak (*Quercus coccinea*) are still green, or
are only just beginning to turn, but in a short time this tree will be
the most brilliant in color of all the Oaks which can be grown in this
region. The Scarlet Oak is comparatively rare in the immediate
neighborhood of Boston, but in Plymouth County it is, perhaps, the
most common Oak tree, and the autumn splendor of the woods in which
this tree abounds will well repay a late October visit to the Old Colony.

The leaves of no other shrub in the Arboretum are now so bright
scarlet as those of the common Highbush Blueberry of New England
swamps (*Vaccinium corymbosum*). This plant has much to recommend
it for general cultivation; the habit is good, the flowers are beautiful,
the large bright blue fruits which cover the branches in early summer
are very handsome and of better quality than those of any other Blue-
berry, and the autumn foliage is unsurpassed in brilliancy. Young
plants can be easily transplanted from the swamps and succeed in any
good garden soil in which they grow rapidly and flower and produce
fruit in abundance. The Highbush Blueberry has been largely planted
in the Arboretum shrubberies and there is a group of these plants on
both sides of Azalea Path at its entrance from the Bussey Hill Road
at the base of the Overlook.

Almost as brilliant here as the Highbush Blueberry are the Japanese
species of *Enkianthus* which are established on the lower side of Azalea
Path. The largest of these, *Enkianthus campanulatus*, is a tall nar-
row shrub with slender erect stems and drooping clusters of pale,
Heath-like flowers. Like the other species its greatest beauty, how-
ever, is in the autumn when the leaves turn bright scarlet. This plant
and *Enkianthus japonicus*, a much dwarfer species, are found in all
Japanese gardens where they are grown for the colors of their autumn
foliage. Although perfectly hardy and in every way satisfactory
plants, the different species of *Enkianthus* are rarely found in Ameri-
can gardens.

One of the most interesting shrubs in the Arboretum in early autumn
is the eastern Asiatic *Evonymus alatus* for, unlike those of any other
plant in the collection, the leaves turn a clear rose color. This is a
large, wide-screading, rather compact shrub with branches furnished
with broad corky ridges and inconspicuous flowers and fruits. Its fine
habit and the unusual color of the leaves in autumn are its chief claims
for attention. Unfortunately the leaves fall early and their period of
beauty is short. There is a large plant in the Evonymus group on the
right-hand side of the Meadow Road and another on the left-hand side of
the Bussey Hill Road above the Lilacs.

Of the shrubs with leaves which turn orange and scarlet in the autumn
the most conspicuous now is *Fothergilla major*. *Fothergilla* is a genus
related to the Witch Hazels and is found only in the southeastern United
States where four species have been distinguished; they bear leaves
which generally resemble those of the Witch Hazels and showy terminal
heads of small white flowers which appear in spring before the leaves.
The largest and the handsomest of the species, *Fothergilla major*, some-
times grows to be ten or twelve feet high, and it is the tallest of the
species which is cultivated here. This and the related *Fothergilla mon-
ticola* are mountain species and very hardy here. The other species
are smaller plants from the southern coast region and require especial winter care.

Every one in New England interested in gardens knows the brilliant autumn colors of the Japanese Berberis Thunbergii which has been much planted here in recent years and is now an extremely popular garden shrub. Some other Asiatic Barberries, although still little known here, are equally beautiful at this season of the year. The dwarf form of Berberis Thunbergii (var. microphylla), of dwarfer habit and smaller leaves, which originated in the Arboretum several years ago, is an attractive little plant, and a Japanese variety of the species (var. Maximowiczii) is a larger plant than the type, with arching stems, larger leaves and larger flowers and fruits. In the autumn the color of the leaves is as beautiful as those of Berberis Thunbergii. But probably the handsomest of all the Barberries which are hardy in this climate is the Japanese Berberis Regeliana. This is a large shrub with the habit of the common Barberry, but the leaves are larger and more lustrous, the fragrant flowers are larger and of rather a paler shade of yellow, and the fruit is more brilliant; in the autumn the leaves turn orange and scarlet. This Barberry was among the first of the Japanese shrubs brought into American gardens as it was cultivated at the Parsons' Nursery on Long Island fully fifty years ago and was then known and distributed as Berberis Hakodate. It appears, however, to be still very rare in the United States and Europe. There is a large clump of this species among the Barberries on Hickory Path near Centre Street.

Another Japanese Barberry, Berberis Sieboldii, is well worth a place in every collection for the beauty of its deep dull red autumn foliage. This is a smaller shrub with erect stems forming a round-topped head, large flowers in few-flowered clusters, and large shining fruits.

There is now a large number of new Chinese species of Barberry in the Arboretum but the value of many of these as garden plants here is not known. Two Chinese species, Berberis diaphana and B. dictyophylla which were discovered a few years ago by French Missionaries who sent them to France whence they reached the Arboretum, are now known to be plants of exceptional value. Berberis diaphana is a low round shrub with solitary pale yellow flowers which are followed by large red fruits. The habit of this plant is unusual among Barberries and make it valuable in small shrubberies. Its greatest beauty, however, is in the autumn color of the leaves which is not surpassed in brilliancy by that of any other Barberry. Berberis dictyophylla is a tall shrub with slender erect stems which form an open irregular head, small spiny leaves which are light green on the upper surface and silvery white below, large pale yellow flowers solitary or in pairs and red fruit. This shrub is attractive throughout the season and is particularly beautiful in the late autumn when the upper side of the leaves turns scarlet and the lower side retains its silver color, a condition which is found in a few other plants and is always attractive. These Barberries are established in the Shrub Collection and can be found in the supplementary Barberry collection on Hickory Path.

The Arboretum will be grateful for any publicity given these Bulletins.