Weeping Trees. A year ago a short account of fastigiate trees, that is trees with abnormally erect branches, appeared in one of these bulletins, and it may be interesting to supplement this with an account of the trees commonly called “weeping,” that is trees with abnormally drooping branches. Such abnormal trees have been industriously hunted for and largely propagated by nurserymen because many of their customers are interested in curious plants which are the joy of the owners of many suburban gardens, especially in Europe where happily such plants are in more general use than they are in this country. It can be said that “weeping” trees are less useful than some of the pyramidal trees for they cannot be used in mixed plantations or bear crowding, and must stand as isolated specimens in the park or on the lawn or the effect of the peculiar habit for which they are valued will be lost. Weeping trees of many of the large Willows are propagated by cuttings, and those of other trees by grafting a weeping branch on a stem of a normal tree of the same or of a related species, and it can be said generally that the Willows with pendulous branches produced from cuttings are the handsomest of the pendulous trees because they appear less abnormal.

Willows. The best known of the trees with pendulous branches is the Weeping Willow from China, a large tree with long slender drooping branchlets which sweep the ground, and narrow, dark green, very lustrous leaves. This is the common tree Willow in the region bordering the Yangtse River for two thousand miles from its mouth, and the one frequently planted in villages and cemeteries in other parts of the empire. For centuries this has been a favorite tree with the Chinese, and is a familiar object in many Chinese pictures, and is often repre-
sented on Chinese porcelains and wood-carvings. It is uncertain when this tree first reached Europe but it was probably brought to western Europe from Asia Minor late in the seventeenth or early in the eighteenth century, and as it was supposed to be a native of the valley of the Euphrates it was named Salix babylonica. It is unknown when this tree was first brought to North America where for many years it has been exceedingly common in the middle and some of the southern states. In Massachusetts it often suffers from cold, and this tree is less common here now than it was fifty years ago. Hybrids of Salix babylonica with the European S. alba and S. fragilis are sometimes cultivated in the northern states where they are very hardy and the most beautiful of the trees with pendulous branches which can be successfully grown in Massachusetts. The best known perhaps of these trees, S. Salamoni, is supposed to be a hybrid between S. babylonica and S. alba. It is a large tree with a broad head of drooping branches and leaves which are dark green above and silvery white on the lower surface. Only the female tree is known and it is not known where it originated. This is a tree which should be more generally known and planted in this country. The tree known as the Wisconsin Willow is probably of similar parentage. This tree has been largely planted in the northern states where it is perfectly hardy and a handsome and useful tree; the branches are perhaps rather less pendulous than those of S. Salamoni. S. elegantissima, S. blanda and S. pendulina are supposed to be hybrids of S. babylonica and S. fragilis, and are intermediate in habit and foliage between their parents. S. elegantissima is often found under the name of S. babylonica in regions where the latter is not hardy. In the northern states it is sometimes called Thurlow’s Willow. S. alba vitellina pendula is usually considered a pendulous form of the Golden-barked Willow, or as a hybrid of the latter and S. babylonica. Whatever its origin may be this is one of the handsomest Willows which can be grown in the northern states. In nurseries in this country it sometimes appears as S. babylonica, var. ramulis aureis, or as the Golden-barked Babylon Willow. The Kilmarnock Willow is a form (var. pendula) of the European S. caprea. It is a plant with thick pendulous branches, and when grown as a standard these form a regular umbrella-like head. This is a popular tree with American nurserymen but the specimens which they produce are more curious than beautiful.

Beeches. The European Beech, Fagus sylvatica, has produced several forms with pendulous branches. The best known of these trees, var. pendula, does not grow very tall, and the principal branches are horizontal and wide-spreading, and from them the branchlets hang down nearly vertically. In habit this is one of the most remarkable of all the trees of abnormal growth, and the great tent-like specimens which can be seen in Europe are remarkable objects. This tree was first planted in the United States many years ago. It is perfectly hardy in the northern states but grows slowly here, and there are no exceptionally large specimens in this country. Other varieties of the European Beech are var. miltonensis and var. bornyensis, with more erect trunks and horizontal and pendulous branches; they are handsome trees still little known in this country. Other forms of the Weeping Beech are known as var. pagnyensis, var. remillyensis and var. tortuosa.
Elms. There are two forms of the Wych or Scotch Elm, *Ulmus glabra*, or, as it is often called, *U. montana*. The best known of these, the Camperdown Elm (var. *camperdownensis*) as it appears in gardens is a round-topped tree with stout pendulous branches which droop to the ground from all sides of the stem and form a broad-shaded arbor. *Ulmus glabra*, var. *pendula*, often called var. *horizontalis*, is a more graceful tree. The branches are usually best developed on one side of the stem and are wide-spreading, the principal ones slightly ascending and furnished with numerous pendulous branchlets. This tree is much cultivated in Europe, especially in Germany. A form of *U. americana* with rather pendulous branches has been propagated in some American nurseries as *U. fulva pendula*. Trees of the American Elm with more or less drooping branches are not uncommon but none of them are likely to appeal to the lovers of trees of abnormal growth.

Birches. One of the European Birches, *Betula pendula*, is a tree with slender usually pendulous branches and some of its forms are among the best known and most generally planted weeping trees. The var. *dalecarlica*, sometimes called *Betula alba*, var. *pendula laciniata* or the Cut-leaved Weeping Birch, is a tree with pendulous branchlets and deeply divided leaves. For many years this tree was planted in immense numbers in all the northern states, but insects working under the bark of the trunk and branches have killed most of the trees and large specimens are now rarely seen in this country. The var. *Youngii* has more pendulous branches and when these are grafted on to a tall stem they form a picturesque head in general outline something like that of the common form of the Weeping Beech. Another Weeping Birch in habit very similar to the last but with deeply divided leaves, is var. *gracilis*, sometimes called in nurseries *B. alba laciniata gracilis pendula* or *B. elegans laciniata*.

The Weeping Ash. There are several forms of the European Ash, *Fraxinus excelsior*, with pendulous branches. The commonest of these trees (var. *pendula*) forms when grafted on a tall standard a broad umbrella-like head. Under favorable conditions this variety sometimes grows in Europe to a great size, but *Fraxinus excelsior* and all its varieties do not succeed in eastern North America and are rarely seen here in good condition. In the Arboretum pinetum there is a fairly healthy specimen of this Weeping Ash, the last survivor of an old garden which once occupied the ground. The form of *Fraxinus rotundifolia* with pendulous branches (var. *pendula*) is established in the Arboretum and is a small tree with gracefully drooping branches which form a narrow head. *F. rotundifolia* is a native of southern Europe and southwestern Asia and is sometimes called *F. parvifolia* or *F. lentiscifolia*.

Prunus. There are at least three Cherries which have produced abnormal forms with pendulous branches. The handsomest of these is the Weeping Cherry of Japan, a tall tree with spreading main branches and long slender branchlets which hang nearly perpendicularly from them, and in early spring are covered with drooping pink flowers. The correct name for this tree is *Prunus subhirtella*, var. *pendula*. Not known as a wild tree, it has been cultivated in Japan for centuries. This beautiful Cherry-tree was brought to the United States many years ago and is now often seen in northern gardens. Few early
spring-flowering trees are more beautiful than this Cherry. The form (var. *reflexa*) of the European *Prunus fruticosa* or *P. Chamaecerasus*, as it was formerly called, with drooping branches is a handsome and hardy little Cherry worth a place in small gardens. Few North American trees have produced forms with pendulous branches. An exception is *Prunus serotina*, of which there is a weeping form (var. *pendula*) which is occasionally cultivated. There are varieties of the Apricot and of the Peach with pendulous branches of no particular beauty or interest.

**Cornus florida.** This is another North American tree which has produced a form with wide-spreading and partly pendulous branches (var. *pendula*). As an ornamental plant this tree is not particularly valuable.

**Morus alba.** A seedling of a Russian variety of this tree (var. *tatarica*), known as Teas' Weeping Mulberry, appeared several years ago in the nursery of John C. Teas at Carthage, Missouri, and it is now one of the most generally planted weeping trees in the United States. When the branches are grafted on a tall stem of the common Mulberry they form a narrow, round-topped plant with branches sweeping the ground.

**Malus.** A form of the common Apple-tree (var. *pendula*), popularly known as "Elisa Rathke," with stout, very pendulous branches, is sometimes found in collections grown as a tall standard. As it appears in the Arboretum this tree is more curious than beautiful.

**Sophora japonica.** The form (var. *pendula*) of this Chinese tree with stout drooping branches is one of the best known "weeping" trees and when grafted on a tall stem of the ordinary form the branches make a broad round-topped tree which can be used as an arbor. The weeping form flowers very rarely or not at all.

**Crataegus monogyna.** This is the common European Hawthorn or May, and the form with pendulous branches (var. *pendula*) is a tree of graceful habit and well worth a place in a collection of these plants. There is a variety of this weeping tree with leaves blotched with white (var. *pendula variegata*).

**Ilex.** There are handsome forms of the European Holly (*I. Aquifolium*) with pendulous branches. Unfortunately this tree, which is one of the handsomest of broad-leaved evergreens, is not hardy in New England, although it flourishes in several of the middle and southern states. The most distinct of the weeping forms are var. *pendula* with rather rigid, arching and pendulous branches which form a round-topped head, and the variety *argentea marginata pendula*, known in England as Perry's Weeping Holly.

**Carpinus.** The European Hornbeam, *Carpinus Betulus*, has produced forms with more or less pendulous branches of which the best known (var. *pendula*) has a rather broad head. As it grows in the Arboretum the branches are not particularly drooping. A handsomer plant is the variety *pendula Dervaesii* which is not in the collection.

Want of space makes it necessary to defer until another occasion an account of the weeping forms of a number of coniferous trees.