

not work well on wet days, when the dandelion flowers insisted on staying in bed. Schoolboys in Italy earn an honest penny by collecting the leaves as food for the silkworm when mulberry leaves are scarce. In this country people use the leaves for "greens," and wholesome food it is if we do not mind the slightly bitter taste. The dandelion is well worth studying in the way it protects its flowers in wet weather, and the down it provides for carrying the seeds. Children will be interested in the name "blow-ball," which is sometimes given to the dandelion; and there is a trick of guessing what o'clock it is by vigorously "blowing" the downy tufts from this "ball;" the number left tells the time of day.

Our Native Trees—X.

BY G. U. HAY,

THE ELM AND BEECH.

Although the elm and beech belong to different families, they are so marked as shade trees that they may be taken together here.

The elm (*Ulmus americana*) is one of our most beautiful and stately trees, so often selected for shade and ornament that one scarcely thinks of it as belonging to the forest. Yet it is found in abundance near water courses and in damp and moist soils throughout the Maritime provinces and eastern America. It attains its greatest luxuriance on rich intervals along our rivers. No shade tree can surpass it for beauty of foliage and form. Sometimes it may be seen as a single shaft, with branches near the top and with tufts of short leafy twigs covering the long slim trunk from near the ground upwards. This is the feathered elm. Usually it has an entirely different habit of growth, sending up to the height of twenty feet or so a massive trunk, which divides into stout branches shooting upwards and continuing to throw out smaller branches and twigs as they ascend. The latter have that drooping and spreading habit which give the tree the vase-like form so well known along our rivers. Such trees spread their shade invitingly over the greensward beneath. This is the form of elm so characteristic of the lower stretches of the St. John river.

Under the cooling shadow of a stately Elm,
Close sate I by a goodly River's side.

Sometimes the elm branches, starting out from the trunk near the ground, sweep upward in a large and beautiful curve, sending their tips outward in a far reaching circle almost touching the ground,

and giving the tree the appearance of a huge ball when viewed from a short distance. The fine elm tree near the Normal School, Toronto, and many other famous elms, have this form; but so great is the strain when the tree is loaded with wet foliage that the branches are liable to break off at or near the trunk. The elm, as it advances in age, especially in higher and cultivated grounds, is very likely to assume this form; it is in the younger elms and those growing in the rich alluvial meadows that its stately outlines and graceful curves may be seen to best advantage.

The elm needs an abundance of water and rich soil; when these are provided its growth is very rapid, and it will become a good sized tree in from fifteen to twenty years. Most elms reach the height of their beauty in fifty years or so. They decay early; but instances are not rare, especially in those of the rounded form, where they reach an age of several hundred years. The famous Washington elm, in Cambridge, Massachusetts, under which George Washington took command of the Continental army in 1775, is certainly more than two hundred years old; but this is now decaying and cannot last long.

Many instances are reported of the distance that elm roots will grow in search of water. Some years since a drain in the vicinity of Paris was stopped up, and on digging down to discover the cause it was found that it had been clogged with a growth of roots which proceeded from an elm tree nearly fifty feet distant. (When roots grow in water they develop great masses of rootlets, which was the cause of the clogging).

The flowers of the elm precede the leaves in early spring. They are of a yellowish tinge and hang in close, conspicuous bunches from the ends of twigs. They are very simple in structure, each with a small bell-shaped calyx, with four to nine stamens on long slender filaments, and an ovary having two short styles. During the few days that the flowers remain open they are crowded with bees. The oval leaves are simple, with a sharp point, and their edges are usually doubly-serrate. The seeds mature very rapidly; each is provided with a wing which grows about it in the form of a circle. If the seeds be collected and planted in moist soil early in June they will grow almost immediately, a hint for those who may wish to cultivate this fine shade tree. It is interesting to note that while the leaves of the elm are alternate, the first pair in seedlings are opposite.