

The other Hornbeam, *Carpinus caroliniana*, may not grow within the city limits. A peculiarity of its growth is the manner in which the sinews of the branches are prolonged down the trunk, giving a peculiar muscular or Gothic effect. This is seen also to some extent in the beech. This tree is recommended for arbor-walks in the parks in some cities.

FAGACEÆ.

This includes the Beech, *Fagus ferruginea* or *grandifolia*, and the Oaks, *Quercus*, of which we have only two representatives. (The Chestnut, *Castanea dentata*, is rather a fruit tree, and does not thrive well here).

The Beech deserves to be planted much more commonly than it is. One great objection is that it is apt to be destroyed by boys with their penknives.

It is surprising, since our trees are leafless one half of the year, that so little attention is paid to planting for winter beauty. The winter beauty of the beech is considered quite equal to that of the elm. It is no less charming in early spring, and in the summer-time a forest of beeches has a most beautiful and bewitching effect. The compact, light grey bark of the beech tree is characteristic. This remains unbroken to a great age, and is perpetuated on the branches. Another noticeable feature is the muscular or buttress effect running down from the large branches, and more marked as the tree gets older.

There are several varieties of the Purple or Copper Beech, which add a beauty to a large lawn or park. Some fine specimens may be seen along the Driveway.

There are two species of oak that may be found in the city as shade trees, the Mossy-cup Oak and the Red Oak.

The Mossy-cup or Bur Oak, *Q. macrocarpa*, is very common in Ottawa South. The corky ridges on its branches gives it some resemblance to the Corky Elm. But the branches themselves are very different. In the elm the branches have all an outward and downward direction, in the oak they are contorted and angular, and never drooping.

The Common Red Oak, *Q. rubra*, is the prevailing type at Rockcliffe and in Rideau Hall grounds. This species belongs to the second group of oaks. Their leaves are bristle-pointed, and the fruit matures the second year. It most nearly approaches the English Oak, *R. robur*, in the effect it gives of massy strength and durability. These two species have the widest range, especially to the north, of any of the native species.