THE SHADE TREES OF OTTAWA.*

In this paper several introduced species are included, but only in a few cases are varieties referred to. Those who wish to learn about the most valuable varieties can readily do so at the Central Experimental Farm, where all hardy and useful varieties are being tested. We exclude from consideration in this paper all evergreens and fruit trees.

SALICACEAE.

There are about six species of native Willows that attain the character of trees, yet few of them can stand the dry soil of a city. They are more common in the country and along the borders of streams. As a family they have soft pliant wood, slender branches, and large fibrous roots. The roots are remarkable for their toughness and tenacity of life.

There are several large willows in a vacant lot near Rideau Gate, and throughout lower town they are more frequent than in the other parts of the city. I am not sufficiently familiar with the particular characteristics of this family in the winter to say to which species they belong—whether Salix alba, S. nigra, or S. fragilis, but think they belong to the first, the white willow. This willow possesses some of the more important qualities requisite for a shade tree: it can readily be transplanted and it has great tenacity of life. As long as it has sufficient moisture it will grow. And yet it is not a tree to be recommended. It cannot compare in beauty either of foliage or of outline with other trees. Yet there are some exceptions.

The Weeping Willow, Salix Babylonica, is an introduced species, and deserves mention as a remarkably graceful tree, although it is more commonly associated with cemeteries than as a city shade tree; and I do not know of one growing in the city, although it is included in the catalogue of trees and shrubs that grow at the Experimental Farm, and is classed as "hardy." There are about 150 species or varieties of willow planted there, of which one half are counted as hardy, and possibly more would have thrived if planted on the low ground near the Canal. The Wisconsin Weeping Willow, S. Babylonica dolorosa, has been introduced along the Driveway and is doing well.

Among the Poplars the most important is an introduced one, *Populus nigra pyramidalis*, the Lombardy Poplar. This tree possesses a very characteristic outline, even more so than the elm, and is therefore well known to everybody. This outline is just as marked in the winter as in the summer. Its branches

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