

only in an indirect way, while the ultimate reward, which is admitted by thoughtful persons to be both large and certain, can be realized only after many years.

The subject of tree-planting having been so favorably received (in theory) by that portion of our people most directly interested—the land-owners—my purpose now is to advocate only one branch of it, the growing of black walnut trees, and to treat the subject as suggested by the Editor of this journal, as seen in the title of this paper.

Black walnut trees for lumber, implies the growing of these trees on a large scale and for commercial purposes. This may only be done by individual holders of large areas of land or by the collective efforts of the holders of ordinary farms, which is by far the larger area in this province.

The black walnut tree—*Juglans nigra*—is indigenous only to the southwestern portion of this province, but can be successfully grown, not only anywhere in Ontario, but throughout the cultivated portion of Canada, and also in most of the northern countries of Europe.

Some of the reasons for advocating the growing of walnut trees—trees which are not indigenous to the larger portion of this province, in preference to many other beautiful varieties that are—may be thus summarized :

1. It is more easily propagated, and requires less care and attention to secure successful growth to maturity than most other long-lived trees.
2. It grows and matures best on land less valuable for agricultural purposes generally than most other varieties.
3. It is one of the most beautiful of trees, grows rapidly during its earlier existence, and contributes in many ways during its growth towards securing better results from the farm.
4. The lumber made from the matured tree commands the highest market prices.

It is proposed to treat these four propositions consecutively, but first it may be well to show why so many trees of this variety fail to grow after being transplanted.

If a walnut tree about one year old be carefully taken up from suitable soil, and, with its roots intact, some peculiarities in its development may be observed which may throw some light on its requirements. The portion above ground will be one straight rod from one to three feet in length, and from one-quarter to one-half inch in diameter at its base, and but little smaller at the top. The root, which is about the same length as the tree, consists of one long, straight tap-root having a few tiny rootlets radiating from it, resembling a carrot somewhat in its appearance, especially when it is noticed that the root is about double the size of the stem at the juncture of the two parts. Trees for transplanting are generally obtained from the nurseries when about four years old. At this age the tap-root, when grown in suitable soil, will be several feet in length. It is, therefore, found impracticable to preserve but a small portion of the root