

tinued consumption of coarse food, as pork and potatoes, gives a coarseness to our natures, while on the other hand the daily use of these fine vegetables tends to human refinement and elevation. We are inclined to believe there is much of truth in this opinion; at least we do find that men of refined minds and tastes very generally cultivate these fine vegetables and make them a very considerable portion of their daily food. Again, as refined taste pervades society, our vegetables are not estimated in proportion to their bulk. It is no longer the largest possible size without reference to fineness of grain, and delicacy of structure that now receives the prizes at the exhibitions of horticultural productions. These monstrous growths, with their coarse fibre and coarse flavors, are turned over to the exhibitions of stock feeding roots, where, if anywhere, they belong. Horses and cattle may be able to masticate and digest them.

In the cultivation then of our vegetables for table use we will aim at the production of fine grain combined with tenderness and flavor. To this end we will use fertilizers that have been properly prepared by composting until they are no longer rank and coarse, and in such quantity as experience has taught us will, in our soil, produce quick growth without coarseness. Frequent stirring of the soil by means of hoe or cultivator greatly conduces to this result, and a mellow surface is of as much, if not of more importance than the application of fertilizers.

#### EXPERIMENTS IN TREE GROWING.

BY P. F. BUCKE, OTTAWA.

In the autumn of 1872 I procured from the woods near by some butter-nuts (*Juglans cinerea*) which I immediately planted. I wish here to state that all tree seeds and nuts should be planted so soon as ripe, whenever that may be; if not, their vitality is either altogether destroyed or much impaired. They all came up in the spring of 1873. One of these, which has been twice transplanted, is now, at ten years of age, two feet three inches in circumference at one and a half feet from the ground, and is thirty-four feet high. It began to bear nuts at seven years of age. Had this tree been grown in a grove for timber, instead of for ornament, it would have been much taller, as the branches would have been trimmed off higher up the stem, and the trunk would have been drawn more to the light. These butter-nuts are the oldest lot of trees I have on my place grown from the seed. Maples of the same age are not half so thick through, though nearly as high. The butternut is a very quick growing tree, and well repays by its thick and graceful foliage any care that may be bestowed upon it. The timber and nuts are both valuable, and considering the ease with which they may be obtained, it is certainly most extraordinary that they are now becoming so scarce. A few acres of these trees in rows ten or twelve feet apart would be a magnificent sight.

Whilst in Toronto in the autumn of 1876, I procured some horse chestnuts (*Aesculus hippocastanum*). The trees are now seven years old, and are ten inches in girth and twelve feet high, having been twice transplanted. They do not grow nearly so fast as the butternut, and are not very satisfactory in this cold climate.