that many varieties will grow better than a single variety. One reason is that some strike deep roots and some are shallow-rooted. Another reason—very important—is that all our forest trees are infected at times by insect enemies, and sometimes you have seen trees entirely stripped of their leaves. As a rule, the insects that feed on one tree do not feed on another. If you have a tree stripped in that position where it is sheltered by surrounding trees, it is not apt to be so much injured as if surrounded by trees stripped like itself; and in immunity from insects it is very important to have trees planted in mixed clumps. In Ottawa we have planted out across one end of the farm a number of clumps of trees, and it is proposed to continue it all across the end where we are planting the trees in clumps of one kind, a plan to which, as I have said, there are many objections; but on the other side we are planting mixed clumps, so that we shall be able to demonstrate what the difference actually is, or the advantage of one plan over another by taking the measurements of the trees and by having these living examples to show to farmers in the future. Having plenty of trees there, we shall be able to extend this forest planting in clumps and plots and hedges and belts in such a manner that in a few years we shall have some interesting objects to inspect. We have a farm at Indian Head, in the North-West Territories. There was not a tree or bush anywhere in sight when we took hold last spring. Twenty-thousand young forest trees, of some forty or fifty varieties, were sent up last spring, and were planted out, and most of them were doing well when I last heard. If any fail I do not think we should give up the growing of those particular trees that fail from one experiment like that, because you all know it is a great advantage in planting trees in the shelter of other trees; and in order to provide the conditions that are favorable for testing other trees, a large number of native trees are being grown on the same place from seed obtained last autumn of what is known as the Manitoba maple, the *Negunda aceroides*. From trees grown in Manitoba we raised something like 40,000 young trees, which will compare very favorably with this sample here of Catalpa one year old. The young trees would average a height of ten to twelve inches, and strong-rooted; and with a start there of about 40,000 trees upon the farm we hope in a few years to get sufficient shelter to give other trees a good chance. Besides that, we have found a nursery plantation near Brandon where there was a number of these same trees from six to eight feet high, and we secured about a thousand of those and planted them out so as to make a greater show in the near future, so that the monotony of the farm may be broken in on, and to provide shelter for these other trees to be tested. The same course will be taken on the farm in Brandon, which was began last July. Then with a view to ascertaining how far the black walnut and butternut may be grown to advantage throughout the entire length of the Dominion, I am at present preparing for distribution of black walnuts and butternuts, somewhere about fifty bushels altogether, putting them up in small bags so that we can send those to some four or five hundred points in the Dominion, from Prince Edward Island to Vancouver, taking in the North-west Territories, and while it is not to be expected that these trees will succeed everywhere, yet we shall find, from the great diversities of climate, many localities where both will thrive. I was surprised to find the basswoods growing on the district of the Pembina mountains, a district they are not supposed to reach, and I also found them growing on the Riding mountains, a distance north of Winnipeg, and where basswood will succeed so well I don't see why butternut will not succeed, for it is supposed to be the hardiest.

Mr. MORRIS—Yes, considerably the hardiest.

Prof. SAUNDERS—We know the butternut succeeds in Lindsay, and in Nova Scotia a few weeks ago we found it. I hope in a few years we shall have some good reports from this distribution we are now preparing to send out. It is a very difficult thing to make much impression upon a subject so vast and important as this in a year or two, but if we can once satisfy the people on the North-west plains that trees can be grown to advantage, there is enough energy in the people themselves to buy out almost all of the seeds that can be had, and plant them out with a view to beautifying their homes and modifying the climate, giving that shelter around their farms which is so desirable. We must depend on the people themselves more than our Government help, for whatever