

the management of forests, and much good has been done. One curious result brought out by the Scottish Arboricultural Society is this, and it may stagger the Canadian farmer, that while forests have through neglect been ruinous to many proprietors in Britain, still, when properly cared for by yearly pruning and thinning, they not only repay all the labor bestowed upon them, but yield, on good soils, as profitable a return as wheat or green crops.

Now, I do not expect that we can secure for many years to come the same amount of labor for the rearing of natural or artificial forests as is now bestowed in many parts of Scotland and England; but I do not see how this branch of industry should be neglected—how, for example, our Canadian forests, especially in the neighborhood of towns, should not be pruned and thinned, so as to secure a full and regular crop of good timber, instead of the trees being allowed to grow indiscriminately, forming a tangled wilderness, where the good trees, choked by useless undergrowth, scarcely afford a reward for the labor of felling. There is also to be found in Canada land not adapted for heavy corn crops, but admirably adapted for timber, which would undoubtedly yield a profitable return if planted with suitable trees.

These suggestions I offer as the first thoughts of a stranger on looking abroad upon the country. They may appear ill-adapted to the wants of the country at the present time. It may seem that I have formed an erroneous appreciation of Canada when I recommend the growing of timber, as well as the growing of corn. But both are necessary for the successful development and permanent success of a country like this. While in the midst of abundance we are apt to neglect provision for the future in regard to a crop like timber which requires half-a-life time for its development. But assuredly, if we do not anticipate and provide, the time will come when many districts of Canada, like all other civilized countries, will feel the want; year by year, as the agricultural resources of Canada are more fully developed, the natural supplies of timber will decrease. Need I further allude to the effective means of decorating our cities, which are so fully afforded by our native trees. In Kingston a custom prevails to some extent of lining the streets with trees, to overshadow the passer-by. In oriental countries it is a public duty. In Kingston I trust the taste will extend. But trees are not appreciated here as they are even in Britain. I know that if such natural avenues of gigantic cedars as you have not far from this city were found within the length and breadth of Scotland, they would be all grubbed up by McGlashen's transplanters in the course of a week, and transferred to the pleasure grounds of Edinburgh Advocates. Why should we not have some of them in Kingston, that, in the oriental language of Emperor Akbar, "their sweet odors may reach every one, and that from those luxuries a voice may go forth to travellers calling them to rest in the cities where their every want will be supplied."

I have thus thrown out a few hints that may suggest inquiry or discussion or contradiction. It will be strange if I have talked so long without dropping some thought that may take root in some one's mind. One thing is certain, that I have not been sowing on a stony soil; and if perchance one seed shall grow up and bear goodly fruit, I shall know that it was not *all* chaff.

The lecture was illustrated throughout by reference to drawings, &c.

ABSORBENT POWER OF SOIL.

Absorption, defined by Webster as "the act or process of imbibing by substances which drink in and retain liquids," is a quality possessed by all soils in a greater or less degree. And of this difference in capacity, especially as regards absorbing and retaining manures, something has long been known, and has given rise to the application of the terms "hungry" and "quick," to loose and gravelly soils, because they do not long show the effect, and speedily manifest the action of manures, while clays are said to "hold" the fertilizing matters applied. The investigations of chemistry show that besides what would naturally result from the different mechanical action—the compactness or porosity of the soil—there are differences in their chemical affinities for acids, alkalies and gasses, which vary their powers of absorbing and retaining the elements of fertility derived from manures.

Loam and aluminous soils were found by Prof. Way to possess the power, when used as a leach or filter, of retaining the ammonia, phosphoric acid, potash, etc., contained in the drainage of a London sewer—the very elements most valuable for manure—and to