a whole, is in a primitive condition. In relation to English markets, therefore, and the prospects and profits of the British farmer, my persuasion is, that year by year, our transatlantic cousins will become less and less able, except in extraordinary seasons, to send large supplies of wheat to our island ports. And that when the virgin freshness shall have been rubbed off their new lands, they will be unable, with their present knowledge and methods, to send wheat to the British market so cheap as the more skillful farmers of Great Britain and Ireland can do. If any one, less familiar with agriculture, doubt that such must be the final effect of such an exhausting system, now followed on all the lands of North America, I need only inform him that the celebrated Lothian farmers, in the immediate vicinity of Edinburgh, who carry all their crops off their land as the North American farmers now do, return, on an average, ten tons of well-rotted manure every year to each acre, while the American farmer returns nothing."

Such is the estimate of our position and prospects, formed by one who is well qualified to judge, and our own experience will soon attest its truth. The question now is, shall Canada maintain and advance her status, or shall she retrograde? There is not a man here who does not respond "we shall not be second in degree to any farmers in the world, and our country shall be as prosperous as theirs.

I would not be understood as wishing to undervalue in the least degree the labours of the early settler. His toils and privations are written, indelibly, on the page of his country's history. I have not lived 22 years in Canada without knowing something of them, or be unable to appreciate them. When I look around me and see so many venerable looking men, whose grey hairs gather to the olden time, the imagination can portray very different scenes from those which now meet our view. There are those here who can look back to the time when the only building on the place where Coborg now stands, was the old bakehouse, where supplies of bread were obtained by the few seafaring men who crept along the coast, with their scanty cargoes of merchandice or military stores. In those days there were none of the floating palaces which now minister to the ease and comfort of travellers. But if discovery and progression have been rapid, it is because the first steps were taken so securely by the "Pioneers." The solitary axe in the wilderness seemed but a hopeless instrumentality, but it was a sure precursor of our present prosperity. The jaded ox team of the early settler, winding its way through the almost tractless forest, like a forlorn hope, was an earnest that to day the Iron horse would with gigantic strength, and with almost the speed of lightning, dash along the remotest parts of the Province.

To return to the subject of agricultural education. It has been already hinted that for the learned professions, thorough training is imperative. This is also the case with every trade. A man is not deemed competant to make a coat or a shoe, who has not served an apprenticeship of several years. Yet men are expected to manage farms who are mere tyros in experience, and in a great measure ignorent of the science of agriculture. If the next generation of farmers could be well educated in their profession, it is almost impossible to estimate the vast change which would take place in the world's progress. What is needed is, Education, in the true and proper sense of the term, namely, the through training of the mind with a special reference to the practice of Agriculture. It includes the theory and practice of the professions, neither separately, but both combined. Theory alone cannot make a man a good farmer. In order either to do work well or to be fitted to direct others in the performance of it, a farmer ought with his own hands to have gone through the process. A young man, when commencing his course, should begin at the rudiments, and progress step by step to its completion; doing with his own hands daily, the labour in each department. But together with the correct practice of farming, he must call in the aid of science in order to make him a good farmer. Science must assist him by telling what sustenance each kind of crop requires, whether it be organic or inorganic, and from careful analysis of the soil, whether such substances be among its component parts, and in the necessary proportions. No amount of merely practical skill can in all cases indicate this; science alone can determine it. How often is the merely practical man bitterly disapointed when, after preparing a field in his usual way, he finds that the crop falls far short of his expectations. Such failures cannot be accounted for by any incidental and obvious causes; there is the want of *something* to complete the amount and kind of food necessary for the crop, but he can't tell what that *something* is. Here science must aid him, or he will be left to grope in the darkness and mist of uncertainty. We learn much from the book of experience but its teachings are vague and uncertain, unless we are somewhat acquainted with the laws which regulate the universe. A physician practising his profession in ignorance of general principles, and trusting to his experience, might avoid doing much mischief in ordinary cases, but in those of complexity and peril, he would be completely at sea and utterly helpless. The like case is that of the farmer who has no scientific knowledge. He may indeed wish to reason correctly the laws of the physical world, but this he cannot do accurately without science. This is the difference between the empirical and the scientific physiologist. The empiric is contented with observing and recording the resulting fact, while the scientific physiologist must ascertain the manner in which physiological laws operate. The attention of the one is directed to results in the improvement of his art, and that of the other to the enlargement of his stock of knowledge. There is a strong tendency in those two methods to combine and unite in one grand result. That they do combine is unquestionably true. All science is true, and the result of the operation of the great principles which it teaches must be exactly in accordance with it. Now, the object of the science of agriculture is, to construct a scheme of knowledge which shall not only explain results, but be a guide to the evolution of correct systematic practice. This identity of result is not merely important as respects the discoveries and improvers, but to man as man, elevating him morally and intellectually, and providing largely for his temporal wants.

It is often painful to witness the apathy which exists in reference to the acquisition of agricultural knowledge. Worse than this is the hostility of many practical men to what they term "Book-farming." They seem to have an instinctive horror of all knowledge but that which is acquired by themselves in their own sphere of observation. And they have no idea of imparting the benefit of their experience to others. They selfishly forget, that they have learned something, of which at the outset of their career, they were ignorant. They say that they had to acquire their stock of knowledge from experience through life, and it is only fair that others should go through the same ordeal, Hint to them that even they might be benefitted by the experience of others, and they