

almost proclaim aloud what should be their agricultural industry. Grass and roots grow as they will not grow throughout the North-west. These will make beef that John Bull requires as much as the quarter loaf, beef, which, alive or dead, is both expensive to carry and deteriorates in the carriage by land, but which will in fair weather actually thrive at sea when alive, or can be easily and safely carried by refrigerator ships. Beef offers us a very profitable trade in which our young sister province cannot at present be a competitor. I do not at all set my face against grain growing, on the contrary I look on it as a necessary rotation, but of such kinds as will subserve the especial industry to which I urge we should turn our attention, the production of meat, consequently our grains should rather be those raised for cattle than for man's food. If the Foot Hills of the Rocky Mountains are, as has often been stated, especially favorable to grazing, i. e. cattle raising, that does not at all make them our rivals—far better, we can be their customers. The English farmer knows well when profit can be made and he is a ready buyer of what are known as store stock—cattle for fattening—for every farmer should know that on a cultivated farm the profit is not in raising, but in feeding, i. e. fattening cattle, and I am not willing that we should lose this the most paying part of our business. Store cattle are best fitted for crossing the ocean; there is less risk and a readier market, but the farmer here loses his profit and the farm the enrichment such manure would furnish. We must struggle to retain the best beef rather than the cattle trade, and if live beef cannot cross profitably we must endeavor to re-organize the dead-meat shipments. It is a question of proper refrigerator receptacles in the port of arrival. It pays to stable and feed a live animal on arrival until the state of the market warrants it being slaughtered—far lighter expense would attend the storing of meat in a cool atmosphere until the salesmen were prepared to handle it.

3rd. I have alluded to my visits during the past two weeks to the prairies and to our dyke and upland districts. One week earlier I visited the Ontario agricultural college at Guelph—the most advanced in agriculture of all our provinces. Our fellow countrymen of Ontario felt how very backward they were in their knowledge of how to cultivate the soil. To follow successfully any profession requires intelligence and hard work. Farming is undoubtedly a laborious profession, but it has this peculiarity that the indolent man, and bad manager, probably labors harder for meagre results than the capable methodical man for far larger returns. The people of Ontario fully recognised

this and that it was the duty of the community and equally its advantage to afford such instruction to the farmer as would induce him to stick more closely to his business, because more intelligently appreciating its merits, and to become a more useful member of society, in contributing more largely to the common wealth, by increasing the yield of his land. It is not merely that the individual farmer is taught to work, but the value of the different crops is ascertained both in the amount of food they furnish to man and beast and in the strength they take from the soil. This, in its turn, must be fed or it cannot produce, hence goes on the constant process of adding to and retaking from the land, and to do this economically and on commercial principles we must furnish the least to obtain the greatest, only adding what is not already present, but ensuring that the plant we cultivate can obtain it. That is but a very incomplete review of the process which the farmer assists. It is a simple matter of labor and brains, but unless the brains employ the hands advantageously, the pocket will suffer and the community will be poorer. If Ontario sees the advantage of further training its advanced farmers, there is greater reason for our affording similar opportunities to our agriculturists who have not in the past progressed as we could now wish. In the last twenty years the agricultural world has been revolutionised. New areas have been opened up and their products brought into competition with longer worked lands. The northwest of Canada and the United States, Australia, India, Egypt, and now most probably Central Africa either already have, or will, become the great grain growing countries. As we shall soon raise far beyond our local consumption, it behoves us to ascertain what we can best raise and what we can best market. My present view, I repeat, is that we should devote ourselves to the manufacture of meat, and, as a matter of public concern, ascertain how it can be most economically made and marketed. I believe it can be best done on a tolerably large scale by the employment of machinery and other appliances. This should mean that our province offers strong inducements for men of capital to engage in farming, and this I hold to be the case. The small farmer may profitably employ his farm and labor in raising and bringing on the young stock which his wealthier neighbor should afterwards turn into beef. There is room for all, but it becomes a necessity that our back country districts, where most of our beef stock is raised, should obtain better bred stock, as it is a most unprofitable business to fatten low bred animals. But with all these advantages,

which nature will or has furnished, but little can be done unless man, the motive power and ruling spirit of the machine, is taught to avail himself and make the most of what Providence has sent for his use. I have often heard and read in my own profession of heaven-born generals, but in examining the history of their lives, I find they were close students of their profession, and this was the secret of their success. Almost every science is called upon to complete the outfit and furnish the knowledge required by a competent farmer, yet no educational establishment has an agricultural curriculum, and the would-be studious farmer is left to acquire his knowledge as he best can. It is a discredit to our province that as yet no steps are taken towards the meeting of this want. If lack of means prevent our local legislature dealing with it, it is satisfactory to recollect that agriculture is also placed under the Dominion legislature, and, as the control of larger funds vests in that body, we may not unreasonably turn to it for assistance. Exceptional causes may enable the Red River valley or the Bay of Fundy estuary flats to yield crops for an unlimited period, but, whether it be the North-west prairies or our own uplands, skill and knowledge are necessary to obtain satisfactory returns, and to hand over the soil unexhausted to the next generation. Theory must help us to cultivate so as to obtain these returns. The native quickness and aptitude of our people will teach them to apply the theory to obtain practical results. You in this district will much belie your Scotch ancestry, if you do not insist on the importance of education, which has given Scotia her prominent place in the world, and if you do not more than hold your own in the healthy rivalry for excellence of cultivation, which will, I trust, arise among our several districts and counties.

PROFESSOR MACOUN of Ottawa, writes: Our trip to the Rockies was a grand picnic, and of course botany was a prominent feature of it. We made extensive collections at various points, but nothing new to me was seen until we reached Kicking Horse Lake; here I noticed a few plants new to me but evidently not rare there. High up on the mountains we collected many alpine species which were common in the Alps. All were highly delighted with their trip and so expressed themselves when they returned to Winnipeg. I discovered *Cystopteris montana* in the mountains at Kicking Horse Lake.

I am glad you had a successful trip in Nova Scotia. General Laurie expected it, and led many to believe so.

Very truly yours,
JOHN MACOUN.