

waves. But this rocky surface does not extend a very great distance inland, and, once passed, the larger part of the land is susceptible of cultivation with good returns. The census of 1881 shows that nearly 2,000,000 acres have been improved, of which almost 1,000,000 are actually under crop, an increase of more than 100 per cent, since 1851 but the increase of production has not kept pace with the increase of acreage and this is partly explained by the wretched methods of farming followed in so many cases, by which lands when run out for crops are turned over to pastures, and fresh lands brought in for crops, and of course all would still be rated as improved, whilst the most productive, so called, dyke land (which are the reclaimed salt flats generally formed at the mouths of rivers in the Bay of Fundy by the great fall and rise of tide, and from which the tide has been excluded) and of which there are many thousand acres in Nova Scotia, have not been much increased during this period. Thus from the lands already cleared for cultivation an enormous increase of crop should, under proper management, be obtained, and the millions of fertile acres now in forest are also available for reclamation, as the rocky and less fertile soils would still supply the necessary timber for ordinary use and assure the necessary rain fall.

A question naturally arises, whether the soil and climate of Nova Scotia are as favorable to the production of crops as other competing regions, and to this I must bring the testimony of 18 year's personal experience in farming, on a new farm and therefore not under the most favorable conditions. Cattle live out at pasture from 1st June to 15 October, and thrive well during that time, and will hold their own for a month longer, if sheltered at night. All kinds of grain grow well. Oats and wheat are usually about 100 days from seed time to harvest. Last year 25 acres of spring wheat yielded me 25 bushels to the acre. Barley gives about 40 bushels to the acre; oats about 45, but there is a tendency to lodge when the crop is heavy. Potatoes have usually given me about 275 to the acre, and Swedes from 550 to 800, according to the season, and exposure of the field; if facing S. or W. giving the smaller crop on account of the heat, and if N. or E. the larger, thus shewing that we are near the southern limits of turnip growing, as they do best in the cooler places. This has led me to turn my attention to grow corn for ensilage on which I can only consider I am experimenting; but last season, I cut, (weighing sample carts as I hauled home) 20 tons per acre on a field of 15 acres. It seems admirably suited to the climate as a plant, and the mode of preservation is economical and the food

appears valuable. Hay, the too favorite crop of our farmers averages, (weight calculated when taken for feed and not when hauled off the field)  $1\frac{1}{2}$  tons to the acre on the upland fields. On 170 acres of cultivated land, in addition to keeping ten horses, and about the same number of cows, the year round, I raise sufficient food, with the addition of some purchased oilcake, which can be paid for by the sale of other surplus crop to feed for the butchers, 100 head of store cattle yearly. Permanent grass is practically unknown us, owing to the damp spring and autumn, they become overgrown with moss. Our most prospering farming districts, are those near tide water, where the flats already alluded to, have been dyked and the flow of the tide barred. On these hay yields  $2\frac{1}{2}$  to 3 tons to the acre without impoverishment, and the after pasture is magnificent, and as the upland in these districts is usually light, the manure furnished from the dyke land hay enables repeated crops of potatoes to be raised for sale, so that cattle and crops can both be sent to the market.

The upland farmers not unnaturally copy the process followed by these favored dyke land owners, and try to work their land as grass farms; the hay fed on the farm will not maintain fertility of the hay fields, the grain is weak and poor, and a prey to weevil or other enemies. Roots for lack of manure to raise them are rarely grown. The farmer and the farm both get poorer instead of richer, and the upland districts through no fault of their own get a bad name. A regular rotation is necessary to the maintenance of fertility on this class of farm. This means stock and implements and plenty of labor and the average run of farmer is unable to furnish these. Men of means, if going into farming, note the absence of prosperity without examining the cause, and, if buyers of land, buy in the dyke land districts, thus capital, the principal want, does not find its way to the upland farms. Technical training is also urgently required, not merely the knowledge to be obtained from books, but instruction in theory combined with its adaptation in practice, a want which can only be met by the establishment of an agricultural school associated with a model farm such as the provincial institution at Guelph in Ontario, where working farmers are taught science and educated men are taught to labor with their hands, and where both branches are taught to the general pupil; but which, to be thoroughly effective and confer the greatest amount of good must be in the locality, and worked under the conditions of climate and products, in and for which the pupils propose to work. The field for the employment of moderate capital and intelligence is to my mind very fav-

orable in Nova Scotia. A young man who will adapt himself to the new conditions and has from £500 to £5000 capital has every reason to expect a very comfortable home and a very good return for his investment. With capital invested and knowledge applied, I consider a very bright future lies before the agriculture of Nova Scotia.

## CLOSING OF THE AMHERST EXHIBITION.

SENATOR DICKEY'S ADDRESS.

*Mr. Chairman, Ladies and Gentlemen:*

I have been asked to address a few observations to you prior to the closing of this exhibition. We have been told on high authority that it is not he who puts on his armor that should boast, but he who takes it off. There were, doubtless, at the outset, misgivings as to the result, but in view of the unpropitious season and other circumstances I feel justified in adding my felicitations to yours that this initial District Exhibition has been fairly successful. I regret that a business engagement made for me a fortnight ago obliged me to be in St. John on Tuesday, and I was thus prevented from attending the opening. But this disappointment was mitigated by the consolation of being able to spend an hour or two at the St. John County Exhibition, and I am bound to say that you lose nothing by the comparison. Yes, gentlemen, this border county, which I may well term the banner county of Nova Scotia, has nothing to fear from competition with the metropolitan county of New Brunswick.

What, then, are the lessons to be derived from what you have seen here the past three days? Let me not be misunderstood. I am far from arrogating any superior knowledge of practical farming, and know well there are scores of people present much more competent than I am to discuss these questions. Yet, born and brought up on a farm, and for many years past an ardent amateur farmer, you will expect me to say something. The first great lesson follows from the very nature of a competitive Exhibition, in the emulation which it excites. This lesson of emulation, so potent in other matters, is especially useful in agriculture and kindred subjects, and is derived from inspection of improved breeds of stock, improved seeds and their products in grains and roots. Let us take the last first. It has been well said that a man who causes two blades of grass to grow where before there was but one, is a benefactor to his race. Well, it by the application of improved seed, or a change of seed, any one can add merely a third or fourth to the