

scarcely any animal food except game and river fish, which were consequently much more important articles in housekeeping than at present, and about the beginning of November families laid in their stock of salt provisions, then called Martinmas beef."

To any one who has visited the upland districts of our Province the description thus given applies with too much truth even in the present day.

I would not be understood as attacking the system pursued by the dyke-land farmers; the temptation to depend on grass so largely is very great; the land yields the crop freely, the labor required, especially in these days of machinery, is very small; the outlay, therefore, is next to nothing; the afterfeed is good and cattle are thus brought forward for the winter very economically; it is a style of farming very suitable to the yeoman farmer who owns his land, works it with his own hands, and, being satisfied with a moderate return, prefers leisure to hard work; but I am satisfied that it is not a system that can be advantageously copied in the upland districts.

Upland, if laid down to hay, must be regularly manured; the produce of about twelve acres of hay when fed to cattle will furnish manure enough to top-dress an acre of grass land; that is to say, grass land depending on itself for support can be manured only in every twelve years; every farmer knows that, under such conditions, the land will soon run out.

To maintain the land in good heart, it must be top-dressed at least every third year; manure must therefore be obtained from some other source, and to purchase twenty tons of manure, haul it to the land and spread it, will cost in most localities nearly \$2 per ton, or \$40 for the manuring; add to this the charges for fencing, taxes, labor in harrowing, picking and rolling the grass-land as well as the moving and carrying the hay, at least \$5 per acre yearly will be laid out, making, with interest on cost of manuring, \$60 per acre, to be spread over three years; balance against this the average yield of $1\frac{1}{2}$ tons per acre, worth in the barn \$12 per ton, and we find the cost of grass land per acre will be about \$20, whilst the return is about \$18, a loss of \$2 per acre, which certainly will not pay the farmer for his capital outlay in land and buildings, nor give him any return beyond the mere daily wages.

Again, whilst recognizing that hay will certainly do more than keep our cattle alive through winter, and that the animals will even gain a good deal, still it is pretty well known that good beef cannot be made on hay alone; roots and grain must also be given; but where hay is fed it must, after all, form the mass of the food, and a full-sized ox will consume at least three tons of hay during a winter, that is to say, will consume \$36 worth of hay, in addition to the value of the roots and grain, worth, at the lowest calculation, \$15 additional; it will take very careful feeding to put \$50 value on to the ox during the winter, and allowance must be made for the cost of attendance, housing, risk of loss, &c., as well as interest on first cost.

I therefore think that an upland hay farm is an unprofitable affair, and that we have followed a wrong course in devoting so much of our land to hay culture. I have always believed and urged on our farmers that they should devote their energies to stock rather than grain growing, and I still hold to that view, but to do this successfully they must

raise and feed roots on a much larger scale than heretofore, and to raise roots means to expend a much larger amount on labor than our old style of farming required; all this labor must be paid for; some crop must therefore be raised that can be converted into cash to meet this outlay, whilst at the same time a cheaper food than hay is required, which will give body and bulk to the roots and grains fed to the cattle. I can find no other solution to this problem than to grow grain, the grain itself turned into money, and the straw cut and steamed, and mixed with the richer food, given to the stock. Our present system, or the want of it, offers no inducement to the capitalist to invest money in farming, there is no cash return commensurate with the outlay; by adopting a regular rotation such as we find in the old country, our upland farmers will require a large capital, but by making a business of farming they will, I feel sure, obtain a larger return. We find the farmers of Ontario are able, with the disadvantage of a warmer, drier summer, which must tell against their pasturage, to raise, feed and sell beef which can be shipped to our market and sold below the price at which we can afford to sell. I believe it is to a large extent because we have continued making beef from hay, whilst they have long since practiced feeding the straw; from their climate they have the advantage in growing grain, we in raising cattle. We must not be left behind in the race but must find out the weak points in our system and must amend them, and I am now free to confess that to raise stock profitably we must grow grain, just as years ago Mr. Mechi, of Tiptree Hall (the celebrated razor man, who went into farming and taught English farmers a great deal about their own business) told me that whilst he trusted entirely to grain as his paying crop he had to keep cattle to maintain the fertility of his farm and enable him to raise the grain. With us I believe the opposite system to be necessary; we must have the grain to bring on the cattle, and to farm profitably I hardly see how we can feed the one without raising the other; holding these views, at which I have not arrived without much thought, and somewhat of a departure from my pre-conceived views, I am especially glad to see that the subject for discussion at the general meeting to-morrow evening is "grain growing." There is yet one point on which I may remark; it is often asked why Nova Scotia does not take her share in the export of live cattle to England, which has already attained such extensive proportions, and it is asked are there no live men amongst us to take hold of this, I have already given as a very strong reason that we do not make our meat as cheaply as is done in Ontario, and this, I trust, we shall soon alter; but there is a still better opening which I still hope may be taken advantage of when our produce justifies it.

Halifax has a naval yard at which supplies for H. M.'s ships of war are stored, and amongst other supplies are large quantities of salt beef, killed, cured and barrelled in England and sent out for use. As long ago as the time when Sir James Hloppe was in command on this station, I brought to notice how much more economical it would be if the beef so used were purchased, killed, pickled, and barrelled here; but we might go further still; there really seems no reason why the whole of the salt beef for the navy should not be prepared at Halifax instead of

at Deptford; it would be a great economy to the Government and a great advantage to our farmers and the community, a certain cash sale for the stock, as well as employment given to additional hands in preparing the meat. At the time I made the representation the supply of first class beef did not justify the matter being pressed too strongly, but I was told it should receive consideration, and meantime our farmers have so much improved their stock, a glance round the yard to-day justifies me in saying this, that I am in hopes we may soon be able to bring the scheme again to notice, with more satisfactory results.

Within the last few years a great change on the subject of farming has come over the community; but a few short years since every young farmer who could possibly scrape a few dollars together abandoned farming and sought other pursuits; and I can hardly call to mind an instance in which a farmer's son, who had received a liberal education, returned to the farm. Now we find not merely these, but the sons of merchants and professional men, after having received a thorough education, taking to farming as a profession. Agriculture must benefit by recruiting from this class young men who have been taught to think and to reason, and to study cause and effect.

That young men should think better of farming is a good sign, but it is not good for man to dwell alone, and unless a man can find a wife in and from the same social scale in which he himself has been accustomed to move, his home will not be a happy one. An English friend of mine, who had taken to farming, in conversation on this subject with me said: "The girls in this country do not believe in farming, and you know our views on the subject of dry goods." I can only hope that the girls are acquiring a better view of life in the country and farming, and that they will smile on, instead of discourage, our young men who have a taste for agriculture.

We all rate England as a very fine agricultural country, and yet Macaulay tells us in the same summary from which I have already quoted, that within the last century between six and seven millions of acres have been enclosed and improved under legislative sanction, whilst probably at least as much then owned by private individuals has been equally improved. Surely then there is hope for us; when once we have started on the road to improvement it is almost certain that, as everything moves more rapidly now than it did a century ago, our progress will be still more rapid than that quoted, and although we may not see it, our grandchildren will be able to say what Macaulay said of England, that since our time our Province has been turned from a wild into a garden.

THE CHIEF JUSTICE'S ADDRESS.

Sir William Young addressed the assemblage at considerable length, concluding as follows:—But the highest aim and the noblest ambition of the friends of agriculture is to attract to it more of the affections and regard of our young men. It is the intellect of a country that draws forth its capabilities. We cannot trace the slow progress, it may be through countless ages, of the wild parent stocks of the plants which fill and adorn our fields and gardens. This is certain, that it is