

top, and I find it is much cultivated in the United States where in its improved form, it bears a good name as a feeding hay.

Kentucky blue grass and orchard grass each have their advocates, but I do not know if they have been tried here to any extent.

Alsike clover is well spoken of. It was represented to me as a white clover as big as red. I was unfortunate as mine turned out red clover as small as white.

I seeded something over an acre last summer with common English rye grass and clover. It was sown with oats and alongside a piece of land seeded with timothy and clover, all did well, as I had worked the land with roots for two years, but the rye grass was high and very thick and better by far than the ordinary grass. I cannot of course say how it will stand the winter.

To my mind the question of after grass as fall feed for the cattle is a most important one.

Hitherto I have been inclined to get my land laid down to grass as soon as I had worked it sufficiently to get a good bottom of grass and have aimed at depending on top-dressing with harrowing and rolling to keep up the crops.

I find, however, that the grass runs out and weeds take possession. Sowing seeds with each top-dressing may keep the sod on the land, and I am anxious it should, for once grass land gets a good bottom the work is simple and easily done. The Mowing Machine has a clean course. It travels over an acre an hour, and tedder and hay rake all do good work.

On 60 acres of grass land this past summer we only broke one section of the Mowing Machine cutter, and that was in an old pine root close to the fence.

In many respects hay is a very satisfactory crop. It is a pleasure to work at it, the days are fine and long, and, when all goes smooth and with good crops, men can get along grandly. I have put hay into the barn as low as \$1 20 per ton (of course all depends on the weather), but, after all, it is an unprofitable crop either by sale or feeding, and upland hay farming, as I have already publicly said, is a poor affair; such a farm will neither pay expenses nor maintain its own fertility.

So much for our field crops, now for the animals by whose means we maintain our farms in a fertile state. I mentioned that Mr. Mechi, in 1864, held the opinion that beef-making did not pay, but had to be done in order to keep the farm in heart. The cattle disease and the increased demand for meat have changed that.

England, a few years since, was manufacturing for the world at large, and coal and iron could not be produced fast enough; wages rose enormously and the so-called working classes launched out into a more extravagant style of living; very little was put by as savings, the prospect appeared bright, and people thought it would last for ever. But the United States, requiring a large revenue to pay for their civil war, put on heavy import duties, and thus unintentionally encouraged and fostered their young manufacturers. Their statesmen saw in this a means of developing the growth of the country, by creating employment for the mechanic and the labourer, and thus benefitting the farmers position by improving his market, and avowed themselves Protectionists on principle, thus giving a wonderful impulse

to the settlement and cultivation of their waste lands.

Immigrants have flocked in by millions. The country has grown and prospered, as no country ever did before. The development of manufactures under this system has reached such proportions, and competition and attention to details have so reduced the cost of production, that now the United States are able to sell as low as England in foreign markets. And the mills, mines and forges of England are idle, or working short time. Hence the struggle to keep such markets as ours open and to discourage us from manufacturing ourselves.

However, referring to the demand for meat in England, the workman increased the consumption in prosperous times and the demand is still great, although times are so dull—as a constant meat diet has become a necessity to them.

The cattle disease too caused the destruction of large herds of cattle slaughtered where one or two showed symptoms of the disease, and thus indirectly also raised the price, as it checked both breeding and importation. This has made meat feeding although somewhat more risky, much more profitable, as beef was last winter selling at the London butchers shops at 1s. 2d., or 2s. cents per lb., and when wheat is selling low, farmers have found it pay to crush the wheat and feed it to the cattle, and barley is much malted in England as being more profitable to feed cattle in that state.

I think, in regard to cattle, that we must work an entire revolution in our feeding, our present system or want of system is (I am speaking of the general run and not of individuals), to pasture through the summer on ground condemned as too poor to give hay, to gnaw the after grass as short as possible, and then to put the animal into the barn and feed it with about 3 tons of good hay, and bring it out again in the spring, under favourable circumstances as good as it went in in the fall. Thus we spend our means and labour in preparing the ground for and harvesting the hay, and our winter in shaking it down before the animals nose and clearing away the manure from behind it. There is next to no growth again during the winter, and all our summer's labour goes to carry us through the winter. We certainly are working in a curious circle. The winter is no benefit whatever, and yet it eats up the summer, what profit is there in being a farmer when all our returns must come from the few months summer run on poor pasture. We must provide better pastures, so as to make the most of the early summer months, and until we can in some manner, by a change of grass seeds, or some other way, improve our after feed, we must raise some soiling crop to cut and carry home and feed to the cattle in the barn, thus making manure and forwarding the cattle in readiness for winter. I have found the Southern corn most successful. It grows very rank and strong and gives an enormous yield to the acre. The cattle are very fond of it, and it makes a great deal of milk. If cut early, and somewhat high, it is stated that it will start again, but in August it is most luxuriant. If it does not pay to cut it so early, tares might be sown for use from the middle of July to the middle of August. The frost takes the corn early in October and after that, until the cattle settle down to their winter food, some other succulent food is necessary.

Drum-head or cow cabbage have been suggested. They are extensively cultivated for cattle in England and Scotland, grow to the height of 35 or 40 pounds and make a great deal of milk. They would probably be troublesome to cultivate until our people got into the way of them, but might be tried on a small scale with advantage.

White or yellow turnips, as already mentioned, come in well as an early winter or late autumn food, and meet a want between the green and the dry food.

And now to keep up the growth through the winter, in fact to use the whole twelve months to profitable purpose we must give time and study to this question.

Swedes at first, and later on, mangolds, furnish soft feed and swell the manure pile. The produce of a third of an acre of turnips goes a long way towards feeding an animal; with these, and some grain or meal, and the animal can be kept thriving. But they require some bulky food also to fill them out. For this purpose hay is too expensive, and I am satisfied cannot be profitably employed. As we work into a regular rotation and raise grain for sale, the straw will be virtually a refuse on our hands. It will, however, with the food already mentioned, satisfy the required feeding conditions almost, it not quite as well as hay, and the land now used for hay can be appropriated to other and more profitable purposes; or the hay itself, where grown in rotation, can be taken to market, and with less thus offered the price must rise.

We must get out of the happy-go-lucky style of farming: of raising what we can, and selling anything that will sell, in order to raise a few dollars as we happen to want them. We must go to work as food manufacturers in business fashion, and, with proper appliances, with a definite idea of what we are raising for market, and what for home use. In fact, we must live by our farms and not simply on our farms.

#### BYE-LAWS OF THE BAYFIELD AGRICULTURAL SOCIETY, OF THE COUNTY OF ANTIGONISH, Organized the 6th day of March, 1877.

1. This Society shall be called the Bayfield Agricultural Society, the boundaries to be as follows:—Commencing at the eastern bank of Jimmie's Pond, thence to the eastern line of lands occupied by John Torpey, thence to the eastern line of Peter Delorey, thence to the eastern line of Edmund Flynn, thence to the waterfall on Southern branch of Little River, thence westwardly to the public highway, commonly called Old Manchester Road, where it is intersected by the line dividing the County of Antigonish from the County of Guysborough, thence along the eastern bound of such highway northwardly until it comes to the eastern bank of Black River, thence along such bank down stream until it comes to the waters of Pomquet Harbour, thence along the eastern shore of said Harbor to the Bay of St. George, thence along the shore of said Bay to the place of beginning. It shall be organized in