

ation of Nova Scotian farmers.—*Ed. J. of A.*]

Here is the grand field to which we must look for development and progress. One half of the kingdom is in permanent pasture. The last Board of Trade returns give 22,156,541 acres in 1867 against 21,174,797 in 1866, shewing an increase of 981,754 acres in grass land. These returns are exclusive of heath or mountain land. Our grass lands are now in the hands of Nature—they should, and I hope will, pass into the hands of man. We have heard too much lately about laying down lands to grass, and depending on foreign countries for corn. Judging from the latest statistics, that opinion appears to have been acted upon. I protest against this mistaken practice, as most injurious to the country at large. I shall shew you by a statement of facts that the grass land of this kingdom is a great national loss and mistake—that it is starving our people, and to advocate its extension is a cruel error. Not one loaf of bread for man is produced by more than one-half the land of this kingdom. What would have been our fate this year had all the kingdom been in grass? In lieu of a superabundant wheat crop, we should have had a famine. The 22,000,000 of acres of grass lands have, this unusually dry season, been almost unproductive, and caused a heavy loss to the occupiers and to the country at large, while our heavy wheat crop, with its unusual breadth and superior quality, is a blessing and a profit. We must, as a result of the season, have dear meat, at any rate for some time to come.

Laying down to grass means starving the people and depriving them of employment. It means stagnation in trade and manufactures, and a throwing out of employment a very large portion of our artisan population. Natural grass land employs little labor, capital or machinery, and produces little food for the people. The pastoral day has gone by: it cannot remain in the face of an overwhelming and industrial population, demanding food and employment.

Grass lands are coveted just because they require less capital and less skill, and therefore landowners find always plenty of tenants for the same. Landowners like them, because the buildings are few, primitive, and uncouth, repairs small, drainage seldom asked for, residences mean, and suited to uncapitalised tenants. There is not much trouble about this sort of landowning or farming. It is an unaltered state of nature—no change, no progress, and very little increase of rent as compared with arable land. All this is contrary to the general advance of the country in wealth, intelligence and population, and totally unworthy of the British people.

We must infer from the increase of grass land that there exists an opinion that it does not pay to convert it into corn land. The proofs, however, are all the other way, as I purpose presently to shew. In pluvial districts and suitable soils, especially where irrigated, there may be some excuse found for grass lands, but in our dry cereal districts permanent grass is a mistake—nationally, almost a crime. An experience of twenty-five years enables me to speak practically on this matter, for out of 170 acres I have only 14 acres in permanent pasture as a run for my stock; and instead of robbing and starving it, I never allow any animals to feed upon it without giving them cake, corn, &c., as supplemental food. For all that, its produce this dry season is at a minimum of value, while my 73 acres of wheat yield 6 qrs. of corn and 2 tons of straw per acre, the latter available as food for stock, representing together a value of £20 per acre.

But let me proceed to show you how little our grass land produces compared with our arable land, and then you will at once perceive how great is the national loss it causes.

Our 11,431,440 acres in corn crops produce, on an average, an annual sum of about £83,000,000, besides straw.—What do our 22,156,541 acres of permanent pasture produce?—according to my rough or approximate estimate only about £50,000,000, or about 43s. per acre; while our 11,431,440 acres in corn produce £8 per acre, besides about £2 worth of straw. We can thus understand why the gross produce of the kingdom is only £3 15s. per acre, and its capital between £4 and £5 per acre; and we can imagine how wretchedly robbed and starved must be the bulk of the grass land of the kingdom.

Grass lands, instead of being well fed with manure, are too often used as milch cows for the arable land. But poor, wretched, exhausted pastures not only keep every one at low water-mark, but the labourer on such lands should be of the Malthusian or Millite school, and not marry; for how can an increasing population find food or employment on a never-changing and non-improving soil and crop? It is this unfortunate fixity and stagnation that beget a bad name for our western and grass land districts, and furnish Canon Girdlestone and others with the means to attack agriculture.—Grass land, looked at from every side, presents weak points, and is no longer consonant with our tripled population and the progressive spirit of the age.

To shew how little labour is employed on permanent pasture, a friend, who was steward over a large grass estate in Northamptonshire, assured me that the shepherding was only 1s. 6d. per acre,

the attendance on cattle proportionate, one-third of the grass being mowed for hay would require more labor, but the average would probably be under 5s. per acre; on arable farms it would be from 20s. to 40s. per acre. On my farm it is 50s. per acre.

In confirmation of my censure of grass lands let me refer you to the late Mr. John Morton's report on the condition of the Whitfield Example Farm before and after its improvement (see "Morton on Soils," p. 248):—

"*Before improvement.*—Total acreage, 232, of which 164 were pasture, 68 arable. Tenant's capital, £726, or £3 per acre. Annual produce, £463, or £2 per acre. Labour employed, 8s. 7d. per acre; rent and taxes, 22s. per acre.

"*After breaking-up.*—Landlord's improvements on the farm by drainage, new roads, new buildings, &c., £15 per acre, or £3500. Increased rent, £175 per annum; tenant's capital, £16 per acre; increased produce, £2904."

Mr. Morton estimated the value of the whole produce of the farm in its improved condition at four times that of the produce of the farm for the last twenty-one years. Mr. Morton made these remarks:—

"Houses and buildings very limited, and in a very bad state of repair.—Forest-like appearance presented by pasture land. Immense number of trees crowded together in the hedgerows, injuring the pasture, destroying the fences, preventing the drainage, and shading the grass, thus making it unpalatable."

These remarks would apply now to immense tracts of land, undrained and unimproved. At vol. ix., p. 54, of the Royal Agricultural Society's *Journal*, the late Mr. Woodward, a wealthy and successful farmer, whom I knew, gives an account of the advantages he derived from breaking up poor worn-out pasture land. Mr. Woodward, in 1844, pared, dug, levelled, and drained 20 acres, at a cost of £7 10s. per acre. The first year it produced 42 bushels of wheat per acre—sold for 14 guineas. The second year 50 bushels of wheat per acre; the third year 48 bushels per acre—all without manure; the fourth year, with 2½ cwt. of guano per acre, it promised to be a large crop. This poor grass land was only worth 25s. per acre before improvement. By this operation Mr. Woodward was enabled, besides other advantages, to give employment to forty labourers for nearly three months in the dead of winter. At that period a great many laborers were out of employ. This was also the case hereabout when I carried out my drainage, digging, and other improvements, wages being then only 8s. per week, with a considerable over-supply. I dug with forks much of my land at 2d. per rod, or