

year is better filled and heads longer than any I have ever had, while the whole country is complaining that the grain will not fill, yet I am convinced that I shall not have anything like the number of bushels I expected when sowing in the spring. This can be accounted for in the following way: as fast as command of manure would allow me, I have been endeavouring to get small fields knocked into big ones, and consequently had to repeat barley twice on some of them, thinking it safe as the fields were cleaned only the summer before last; the result was that the extraordinary season for weeds, assisted perhaps by the drainage, caused the second year's grain to be almost smothered again. I intended to farm as much as possible on the four course rotation which I believed to be the best for well farmed clay land in this country; to do this, clover should only be trusted for one year, as it is strictly annual, but, when cut before it forms its seed it occasionally becomes biennial, trusting to this, and as I could not bring this field immediately under the four course rotation, the clover failed, and had to be rapidly ploughed up in the spring and put to barley. The result was a partial smothering but still a good crop; these were failures that were my own fault, and can only be attributed to downright bad farming, or in other words, attempting to do too much with too little knowledge. The other two failures in barley were caused by circumstances beyond my immediate control, the land was so rough, actually having, in many cases, to build before the horses could walk over it, that the plough could not scarcely enter every part of it, so thistles had their own way too much; the other failures were caused by the new farm not having gone through the high farming operations, drainage, &c. I will dwell on these few statements, as they show to what extent drainage may be trusted, and how far it can be accounted answerable for success or failure in crops, or to use a better term, in a farmer's general prosperity. Reviewing the past year, I may consider the crops on my own farm, with exception of a few acres foul barley, as good, but could have been immensely improved by better farming. I do not intend to go into practical farming, as I know it is useless, unless some way is devised of getting the means, but I cannot forego giving one more instance of bad management, which, added to the others, must plainly account for the fact that while some farmers lose money in farming on a large scale, I have to say in England, for the principles here advocated are not carried out in any part of America, others make fortunes. The other instance referred to was this, the lower half of the field that had to be ploughed up, showing some appearance

of grass, and the season being so bad, was allowed to remain. As it was, although from the high state of its cultivation the grass made up in height, to some extent, yet a loss was incurred which should not have been. As many hay selling farmers may remark that it served me perfectly right for not sowing timothy, I believe the day is gone by, for anything but high farming in Nova Scotia, and the four course rotation is decidedly the best, particularly after draining. This year has also convinced me how our clover crops are under valued, so much so that I believe both by theory and practice through them chiefly the worn out lands of Nova Scotia will be restored or never restored, the latter being the more likely. I am sure I do not exaggerate when I say that my cattle (stall fed) increased more this winter on clover hay alone than ever they had before with ordinary hay and turnips combined, and we must also recollect another important fact, that the experiments of Messrs. Lawes & Gilbert, conducted over a space of twenty-eight years, have shown that a ton of clover consumed is worth as much, on account of the manure produced, as the hay would generally sell for in this market. Of course to understand this we must have some knowledge of Agricultural Chemistry, and the principle upon which manures are valued. I find myself deviating from the original point of discussion, and again going into practical farming, but, the whole thing is so much mixed up in its different branches, that it is almost impossible to avert it.

Again to refer to the original subject, is the amount of farm capital required arbitrarily fixed, or are there no means by which the amount to be expended on a farm can be ascertained? this is of the utmost importance, as it applies to farming, as well as to any other business; it enables a man to ascertain the extent of lands he should occupy to suit his capital and also prevent discouragement when the work is well done, and there is really no occasion for discouragement. This is recognized in the case of the Dyke Lands, where they usually realize about as much for sales, so that the total value to annual return shall be about six per cent.; upland should also be valued in the same way, thus an acre of well drained upland, in high state of cultivation, should represent the amount of valuation that could be put on it, after deducting expense of labor and liberal per centage for tenant's or working capital. As I am afraid I am not very well understood, I will endeavour to give an illustration; a farm of one hundred acres of land knocked into a high state of cultivation, that is drained, cleaned, and capable of yielding on the four course rotation, clover in two cuttings four tons, barley forty bushels, oats fifty bushels, turnips

and potatoes fifteen pounds per acre, now what capital I don't say would, but should represent it? certainly not the amount expended by the owner, as this would put the skilful improver on the same footing with the blunderer. The only plan is to estimate the value of crops, deduct the cost of wages, allow liberal per centage for working capital, and the balance will represent the value of the farm without buildings, it would stand thus: clover £300, barley £200, oats £150, roots £375; total £1000 in rough. Deduct wages £3. 3s. per acre, over all a very liberal allowance with machinery, working capital £20 per acre, £2000 at 15 per cent., £300; total £600; value of farm paying £400 per annum, £6,700 without buildings.

I have to estimate by the English law of tenant and landlord, the same rule applies, no matter whether a man owns his own property, or rents a farm, or mortgages one, and is only meant to show the safe, and the only way, which capital can be adjudged when invested in land, and I don't think any one can detect any absurdity in the figures, as I wish to meet any possible objection. I would say the working capital is sufficient to keep up the fertility of the soil by bought food consumed, subsoiling, &c. Many may object to this way of estimating and think that it only applies to the old country, but this rule must apply ultimately to this country. Of course such a system would require a thorough knowledge of his business on the part of the farmer. A father starting his son with a capital of, say two thousand pounds to be invested in farming a farm of one hundred acres, holding the farm as security, would not be safe otherwise, whereas, if the money was judiciously expended it would add to the security of the holder of the farm, besides securing the prosperity of the son, tenant or worker.

Whenever interest money has to be paid at the expense of the balance of fertility, (we use this term and will explain what we mean by it hereafter,) to any one holding a mortgage on a farm, or a landlord, the tenant or mortgagee is paying the interest, more or less out of his landlord's or mortgagee's pocket; this principle is so thoroughly understood in England, that many liberal minded landlords remove all restrictions from tenants when they see they are determined to do justice to their farms. It certainly is not understood in Nova Scotia, and as the laws of nature cannot be tampered with, they will most assuredly assert their own claims, and are doing so now, to any one who can see the signs of the times. If the absurd system now in vogue, of loaning money for Agricultural purposes, actually benefitted any one there would be some excuse for it, but it is not