

No. 2.—FENCE OR NO FENCE.

When I first contemplated writing under the above caption, I intended to advocate the Fence System, being fully aware of the very great difficulty of persuading the public to discountenance long established customs and usages, however advantageous a change might seem. But, after having given the question a calm and impartial consideration, I became so fully convinced of the utility, convenience and economy of the No Fence System, that I concluded to advocate it.

Take, for instance, a hundred acre farm. It will require 910 rods of fencing to divide it into eight fields, with a lane two-thirds the length of the farm. In most places rails cannot be procured for less than \$40 per thousand in the bush. Some places the farmer has to draw them 12 or 15 miles, after having paid for them at this rate, which would bring them to about \$50 per thousand, delivered on the ground—but we will put it at \$45 per thousand, delivered on the ground. Considering labor, with board, at \$1.20 per day, it will cost 75 cents per rod to put up rail fence, the cheapest kind we have. This 910 rods of fencing will cost \$682.50. The compound interest on this sum, with principal, for thirty years (the time the fence will last), at 6 per cent., will amount to \$3,918.50; or, \$130.64 annually. Add to this sum one half the annual rent for the ground on which the fence stands, \$5; the two days that will be lost annually by men and team in opening and closing fences, \$6; the 5 days lost putting up fences that have blown down (labor and board), \$5; and we will have the annual cost of keeping up fences \$146.61—interest not considered on the last \$16, and considered in the most favorable situations—where there are no rivers or creeks to sweep away fences.

We will now look at the other side of the question. In advocating the almost entire abolition of fences, I will discard to a very great extent the pasture system, and adopt the one commonly known as the soiling or green fodder system, a system that has come into use to some extent, but must be more used if we want to make the dairy system pay, as pasture only lasts a part of the summer on account of the severe droughts. If a cow falls off in her supply of milk she cannot be got to yield the same supply however well fed. I am aware, from practical observations, that cows soiled a part of the season only, and by the miserable system of soiling usually adopted by the majority of our farmers, will yield one-third more profit than when not soiled. Suppose a hundred acre farmer kept 30 cows, seventy-five acres would be required for pasture. By the soiling system 20 acres for pasture and 15 for raising material for soiling will be all that will be required if a part of it be rich. Thus 40 acres will be saved, which, at \$2.50 per acre, will be \$100 annually. The annual cost of a fence, at the same rate the other was considered at, will be \$32 annually. Add to this the cost of cultivating this 15 acres for soiling, \$25; cost of seed, \$25; man for tending, six months, at \$25 per month (board included), \$1.50; and you have entire cost of soiling, \$232; or, without fencing, \$200.

Now, Mr. Editor, we have the cost of fencing under the Fence System, \$146.60. Under the "No fence," \$32, a saving of \$114.60, which, with the saving in land, \$100, will be \$214.60. Deduct from this the \$200 for man, cultivating land, seed, &c., and we have the entire saving so far \$14.90 annually. But then where we allow so much land for soiling and a man's whole time, with 30 head of cattle, we expect, and quite properly, too, a large increase in the quantity of milk. Suppose a cow, under the pasturing system, is worth \$20 a year, with the above privileges, she will be worth \$30. Thus we will have on the 30 acres a gain of \$300. Total saved and gained \$324.60.

We have not yet considered hogs and sheep. The former should be kept in the pens from the time of birth until death, except brood sows, which should run in a yard. It is found to be vastly more profitable to keep them up and kill when 9 or 10 months old, than to keep them until the following year. Of course, in order to be in a fit condition for killing at this age, they must be kept up and well fed. Even if you keep them over it is better to keep them up, as by running about it will take a quantity of food to supply the flesh wasted. If you feed them while on pasture they will require as much as when in the pen, and, if let run without extra food, they will not improve enough to pay for the pasture they destroy. With regard to sheep, many farmers who are in the dairy business have discarded them, as they cannot be kept with profit on the same portion with cows. To a person that wishes to keep them we will allow

them 20 acres for 20 sheep, which will cost \$32 annually for fencing, and which will bring down our saving to \$282.60.

There are many other advantages that I might enumerate did time and space admit, such as no fence corners to harbor thistles and other noxious weeds, the road would not become drifted up, and others, but I fear that I have taken too much of your valuable space already.

N. DICKEY.

Essay on Grass and Root Crop.

Written for the Farmer's Advocate and Read before the North Middlesex Agricultural Society.

A very brief glance at the vegetable kingdom, will convince us of the importance of the grasses to the whole family of man, and a more minute and careful survey of this great field of observation will make us wonder that the agricultural world has been content for so many generations to remain in so much ignorance of their nature and properties, as we know they have always been. We all, without exception, derive a great deal of pleasure from contemplating the beauty of the grass; "a thing of beauty is a joy forever." While many of the fruit trees and other productions of the vegetable kingdom are restricted to narrow belts of latitude, the grasses flourish in every region of the earth. The importance of the grasses is shown in the relation which they bear numerically to the total vegetation of the earth; at least one-sixth of the plants that grow belong to this family. Two hundred and fifteen different grasses are capable of being cultivated in Great Britain, and 133 species are proved to be indigenous to that Island. This wide diffusion of the grasses is due, in some degree, to the care which nature takes for their production and protection. The seeds of some varieties are provided with hooks, by which they attach themselves to the hair and wool of grazing animals, and to the clothes of men, and are thus transported to regions widely remote from their origin, and some of their seeds form the favorite food of many birds, are retained in their stomachs, and are carried many hundreds of miles before they are voided. They then germinate under favorable circumstances, and thus the grasses of widely remote regions are interchanged, many of them are furnished with creeping roots, which send forth many creeping shoots, and rapidly cover the ground where a single stem has once effected a lodgment. Nature has also provided for their protection in various ways. A large proportion of them are perennials; they are not injured by the cropping of their herbage. The creeping roots, though bruised by the tread of cattle, are not injured.

The remark has often been made, that he who makes two blades of grass grow where only one grew before, is a great public benefactor. The influence of grass culture on the growth of cereals, is very strikingly exemplified by a comparison of the agricultural statistics of France and England. France has 53 per cent. of its cultivated lands under cereal cultivation, while England has only 25 per cent. Those who hear the statement made for the first time will be surprised, to find that, notwithstanding this disparity between the areas of the grain lands of the two countries, England produces five and one-ninth bushels of grain for every individual of her population; while France only produces five and one-half bushels for every individual of her's. Thus, with less than half of the proportional area under cultivation, England produces within seven-eighths of a bushel per head of what France does.

She is enabled to accomplish this result solely in consequence of the manure furnished by her grass lands. Every acre of English grain land receives the manure from three acres of grass land; while in France, the manure from every acre of grass land is spread over two-and-a-half acres of grain land; or in other words, one acre of grain land in England gets fifteen times more manure than an acre of grain land in France. This statement tells the whole story, and assures us that a like increase of manure would produce a like increase of crops with us. It may be said, and it doubtless will be said by very many farmers, that to talk of doubling our grass crops may be very well to point a moral to adorn a tale, but that it is quite impossible to accomplish it practically; they will assert that the idea is a "castle in the air," a product of Utopia, which will only lead to bewilder and dazzle the blind.

We believe, on the contrary, that it is perfectly practicable not only to double but to treble our present production of grass. Every Canadian will

admit that what has been done once may be done again, when the circumstances under which it is done are similar. They believe that like causes produce like effects, and that what one man has done, another man can also accomplish, if he brings to the task the same tact, energy and skill. But we know that many farmers cut two or three tons of hay from each acre of meadow, while others have cut four or five tons from each acre. If other men bring the same set of causes into operation, why should they not obtain similar results. We can see from what we have said, that nature offers the most magnificent premiums for efforts to improve the production of our grasses. It is therefore clearly our interest to search for the causes of our admitted deficiencies, and to learn the conditions which nature imposes upon the winners of her magnificent prizes. The main reason of the inferior condition of our meadows is, that very few farmers try to improve them. It will not be denied that farmers, in general, bestow much less care upon their meadows, than they do upon their grain lands. Not one farmer in a thousand knows the names of the grasses growing on his farm, or can discriminate between them; grass is grass, and that is all they trouble themselves to know. Like Wordsworth's Peter Bell.

A primrose by the river's brim,
A yellow primrose is to him,
And nothing more.

When forming the meadows after tillage, there are thousands of farmers who never sow any grass seed but timothy and clover; and in New England it is very common to sow Red Top, and in Pennsylvania, Blue Grass is sometimes sown; but those who have done so, congratulate themselves on having done some virtuous thing, forgetting that in the fine old meadows of England, which are the envy of farmers and the admiration of the world, not less than thirty different species are found growing in one field. From what we have said, it will be inferred that we make no high pretensions to very extensive knowledge of this great subject. We cannot teach, for the knowledge we seek is yet to be acquired. If we succeed in impressing readers with an adequate sense of their own ignorance, and in pointing them to the path in which they might obtain light and knowledge, our utmost hopes will have been fulfilled. Also, as regards root culture, we need awakening to the fact that by judiciously growing more root crops, such as carrots, turnips, mangolds and other root crops, we can greatly improve our lands by cleaning them of the weeds and wild grass that grow in abundance, and also improve our stock by having nutritious food for them in the long winter, along with the dry hay or straw that we too often feed to our stock without any other nourishing food whatever. If each farmer, having 100 acres of land, were to raise one acre each of turnips, carrots, and mangolds each year, and feed to his farm stock, see how much better cows would milk, how much more butter he would make, and how much better all the stock would be in the spring, as well as improving the land. Then calculate how much that 3 acres of roots would benefit each farmer, and if each farmer were benefited, how much benefit would it be to the country.

L. E. SHIPLEY.

Dunneerief.

Notice.

During the past month we have received five letters containing money, but no name, place or instruction given. We have, by writing to postmasters, been able to find out two of the parties. One, not found out, has Wroxeter post mark; another post mark begins with a C, no more being legible; another has no post mark on it, not a line or scratch of any kind, except a scratch on the stamp. One letter from Stratford contains one dollar, but no name is given; it says "pay to July next." The persons having sent these letters would oblige by sending their names and address.

Luke Weatherstone sends \$1 for the ADVOCATE; he has omitted to name his P. O. The Postmaster has not stamped the letter. John Morton gives no Post Office.

Be sure and state the exact date of posting the letters, and we can rectify it.

ERRATA.—A slight error occurred in the last number of the ADVOCATE. It appeared as Volume X instead of Volume IX, the letter "I" having fallen out while the "form" was going to press.