

The Field.

Turnips for Manure.

To the Editor of THE CANADA FARMER :

SIR,—Having read with a great deal of interest the two articles by "Vectis" in your issues of November 1st and December 2nd, headed respectively "Cultivation of Turnips and other Roots," and "A new use for a Turnip crop," and as both yourself and the writer invite comment and criticism, I will venture to say a little on the subject. On a farm of eighty acres of cleared land, "Vectis" would have one-fourth, or twenty acres, in each of the following crops, viz.: turnips, barley, clover and wheat. Now, in the first place, such a farm would require two teams to work it on this principle. Well, I presume the twenty acres of clover he would cut for hay; if so, where is the pasture to come from? Or, perhaps, he does not calculate to keep any stock, not even a milk cow; or perhaps he would pasture ten acres of clover, which would keep four cows, in addition to the teams. Well, then, he would plough down twenty acres of turnips to enrich the land, and these, after all the expense and trouble in raising them, would be very dear manure. I think if the farmers find a difficulty in raising six acres and drawing them home and feeding them, and then drawing the manure from the barnyard to the land, they would find it still worse to pull and cut up on the ground twenty acres. Moreover, with his four cows and two teams, he would have the straw from twenty acres of wheat and twenty of barley, and twenty tons of clover hay (for if anything of a crop it will average two tons to the acre in Canada) to be worked up into manure for the next turnip crop. Any practical farmer will say that rotten straw, without roots or grain feeding, is miserable stuff, and will not be likely to hurt his eyesight with the ammonia from it in turning it over. Granting it was practicable to grow twenty acres of turnips on a farm of eighty acres of wild land: if sown early, and yielding a good average crop, they would fatten from 200 to 240 sheep, to commence folding by the middle of September, and with no more trouble than pulling and cutting them up according to the plan of "Vectis." They would surely net one dollar per head profit, towards paying rent for land, wages for labour, &c. and I believe leave the land in as good condition for the next crop as ploughing the turnips under. Some people think it is scarcely practicable to fold off the turnips in this country; but it only wants the proper appliances, such as sheep nets, &c., to fold off both roots and other crops, from May to December, and even later through a good part of the winter, as I will proceed to explain. Suppose we take ten acres, for example, and when pulling them up in the fall, commence at one corner of the field, and put twenty bushels in a pit on every four square rods of land throughout the field, and draw the remainder to the homestead, to be used there. Then, make tight hurdles of lumber, each hurdle one rod long and five feet high. Sixteen of these would enclose four rods, and would form a pen sufficient to hold 100 sheep one day and night. Then form a second pen of the same materials and dimensions, so that the pen that was used to-day could be moved to-morrow, one half of each pen to be covered with oil cloth or tarpaulin, to protect the sheep from storms. Twenty bushels of turnips would be in each enclosure, and with hay and straw to be drawn from the barn would be sufficient for each day's feed, and in 100 days with 100 sheep would manure the land for the barley. Some may think this a wild idea, but I venture to say that it is better feed and treatment than the bulk of Canadian sheep get, besides returning to the land what the turnips have taken from it. In my experience of growing turnips, with the exception of cleaning the land, I find they leave it in very poor condition for the next grain crop; and with regard to

keeping sheep, they are not to be compared to cattle for manure-makers in the barnyard; and unless we either adopt the folding system, or also use some artificial manure, such as bones, &c., for the barley crop, we could not follow the four course system in this country with profit. I cannot agree with "Vectis" that raising wheat or other corresponding cereals must be the special aim of Canadian farming. If he will examine our list of exports he will find such articles as wool, mutton, beef, pork, butter, cheese, &c.; and when wheat comes down below sixty shillings per quarter in England, there are very poor prices in Canada. I would likewise remind him of the old country farmers' adage, that it is better for the produce of a farm to walk off on four legs than to be drawn off on four wheels. For several years past I have followed the four course system above mentioned, on one hundred acres, eighty of which are cleared. In each year I have had ten acres of wheat, ten of barley, ten of turnips, ten of clover, and the remaining forty in pasture, on which I have kept one hundred ewes, one pair of working horses, and from twelve to twenty head of cattle, and have found little difficulty in providing for them all the year round. I have never folded my sheep on the turnips, from want of sheep nets. And here let me call the attention of our flax and hemp manufacturers to the want of such articles as sheep nets and oil cloth or tarpaulin, which ought to be found on every farm, especially oil cloths, to be used in haying and harvest for covering stacks, &c.

I have sometimes left a lot of turnips on the field for the sheep to eat, and next year's crop would show, generally on the highest and poorest knoll in the field, the good effects of it. My barley generally averages thirty bushels to the acre, and the wheat from fifteen to twenty-five, according to whether I mow the clover, once or twice in the season, or whether it is spring or fall wheat, and it is seldom that the clover is less than two tons to the acre. In the years 1865 and 1866, I sold wool to the value of \$245, and sheep, lambs and beef, to the value of \$200 more, in each year, and I would like "Vectis" to consider how much wheat would have to be raised, and the extra toil and labour entailed in marketing alone, to obtain the same amount of money. One hundred acres of land, if properly managed, will keep one hundred sheep, or twenty milk cows for dairy purposes, and one pair of horses, (and the same amount of feed that keeps an extra pair of horses will winter ten calves), which with wool, mutton, beef, butter, and cheese, at the present prices, will more than equal wheat-raising on the plan of "Vectis," which after all is nothing more than a manured summer fallow—a plan which, if it be the best for raising grain, would, if strictly followed, soon place us in the pitiful condition of importing everything we wear, down to the soles of our boots. With regard to rotten turnips, I have very little faith in them. Once or twice I have had the misfortune to lose a pit of one hundred to one hundred and fifty bushels, from over heating. The rotten refuse, in these instances, was spread around, and the effect on the following crop was scarcely perceptible; whereas I have driven the sheep to the pits, and fed them with turnips on the field, and next year's crop would show the effects of it. Again, if ploughing in one or two crops of buck-wheat will, on such land as Long Point, or Lake Erie shore, make such a difference in the yield of wheat, we should be very foolish to spend time and money in raising turnips for the same purpose. It is a wonder that Lord Townsend or Mr. Coke, of Norfolk, never entertained the brilliant idea of ploughing in turnips instead of eating them off with sheep on the blowing sands of Norfolk. These gentlemen, however, were content to raise wool and mutton, and have been the means of raising that county to the highest state of agricultural eminence. A friend of mine ploughs the worst piece of land he has in the fall, then early next spring sows with oats, which he turns his cattle on, when his pastures begin to fail, about the latter part of June, and which they eat and tramp over. He then ploughs it up twice through the season, and has never failed yet in raising twenty-five to thirty bushels of spring wheat per acre. An improvement may still be made on the four course system. Instead of sowing down with clover alone, sow with mixed grass seed for mowing and pasture, and let it lie for two or three years, then plough up the oldest

piece of pasture in the fall. This should be sown with rye, which by the middle of May next will be fit to eat off. Then turn on the sheep, and when they have gone over it, plough up and sow with oats and vetches, or rape, to be folded off with sheep, and finally ploughed up for wheat, either fall or spring, whichever may be deemed most suitable.

This, in my opinion, is a better plan than "Vectis" proposes, but I leave my brother farmers to decide. In my twenty years' experience of farming in Canada, I have heard a great deal of croaking about the land deteriorating; but if it does, it is from bad management. I have cleared my farm from the forest, and, even now, raise as much grain, grass, or roots, if not more, than when it was covered with stumps and stones; and if I had my choice between a new and one of the oldest worn-out farms, I would choose the latter. It is not grain-raising alone that will raise Canada in the scale of nations, but a varied system of agriculture, coupled with manufactures of various kinds, and a population to consume our produce at home.

FARMER.

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Farm Notes and Experience.

The following is the substance of reports from intelligent farmers in different parts of the country in reference especially to last year's crops:

Mr. Richard Peet, of West Williams, says:—"Our fall wheat this year has been a complete failure. I had eighty acres which promised for twenty to twenty-five bushels per acre, and looked well; we threshed only between three and four bushels per acre; the ravage was caused by the midge and weevil. There was a great amount of small and imperfect grain, quite unfit for anything. We must make some change. Some years ago, if we scratched in the wheat any low, we were sure of from thirty to forty bushels per acre; but now, even on new land, we get but very trifling results. My land was well fallowed and prepared for wheat, and every pains taken to put it in in the best manner, but the result is, failure. All our land has been failing for years past, and the whole Township this year will not average five bushels per acre; we cannot account for it. On many of the lands where wheat has followed wheat for years, it is easy to account for failure; but now the first crop on new land fails as often as the best prepared old land, and that whether there is midge and weevil or not." He is determined to try ploughing in green crops.

Mr. John S. Walker, of Glencoe, a very intelligent and superior person, states that the land around Glencoe and Mosa is a loamy clay,—does not glaze after the plough, even in wet weather; it is strong land, and has produced this last year thirty-two bushels of midge-proof wheat, per acre. They appear to have only the old variety. Where they have sowed Soules' wheat the midge has destroyed it. The above crop was produced on pea ground, without manure. They consider their best land the clay, black ash and elm swamps, but it takes a long time to get them into cultivation. If they can put such land into a crop of wheat when it is cleared at first, they do so; but if it is grassy, or so wet that it will not bear wheat, they lay it at once down to grass, and leave it so until they get the stumps out. All the stumps will come out in about ten years, but they generally begin to cultivate at from six to seven years, although it is not the best way, as the stump ground harbors so much rubbish and weeds. They consider it much better to leave it till they can get the stumps fully out; they trust more to summer fallow than manure. They have some excellent Durham cattle, but prefer grade Durhams, as they are hardier and more fit for farmer's service. They think the pure Durhams make greasy butter.

Mr. James Leatherland, of McKillop, has sixty acres improved. We ask him the particulars of his land. He says the soil is good; is a brown clay that crumbles before the plough, and never glazes; that there is some trouble to keep the plough clean. There is a small quantity of limestone gravel through the soil, but not much; has dug a well, and finds the soil the same for nearly sixteen feet before he comes to