

creased fertility of the soil will afford an immediate full return, although a large expense was incurred at first from want of that skill which practical experience only could give. The whole expense of laying these 40,000 tiles very nearly amounts to \$500, and the men employed have many of them earned over the average amount of wages when they worked by the piece. Part of these were laid during the last two months; and though the men worked very short hours constantly, not over eight hours a day, they earned 66 cents on an average, at 16½ cents per rod, digging, filling and laying pipes. The actual cost of the above tiles was \$8 per thousand for two-inch, \$7 for one and-a-half inch, and \$12 50 per thousand for three-inch, at the kiln. Two-inch pipes can now be had at \$6 50 per thousand, one foot long, but if a larger demand was to spring up they could I think and no doubt would be furnished at \$5 per thousand.

Most of this work having been done recently, I can give but a limited exposition of the benefits of tile draining from my own experience. The results of one field, however, are most satisfactory, as the following account will show. The field is the best on my farm, and consequently has been perpetually under crop since it was first cleared, but, from the ordinary rack-rent system of Canadian farming, has never received any manure from the same date. In 1857 a very poor crop of rusted, shrivelled winter wheat, about 13 bushels to the acre was the yield. In 1858 the land was reduced to an apparently excellent condition by ploughing and scarifying, and potatoes planted about the 8th or 10th of June; subsequent rains ran the soil together, and the heat of the sun baked it into a solid substance through which the potatoes could hardly force their sprouts; the crop was barely 50 bushels per acre. In April, 1859, 7¼ acres were underdrained four feet deep and 33 feet apart generally, there being 623 rods of drains; the labor cost \$132, the tiles, as near as possible, \$100, being in all \$30 per acre, or \$232; the preparation, sowing, tillage and harvesting of the crop cost \$21 per acre. The whole expense of underdraining and cultivation of 7¼ acres was \$408. The crop was—4½ acres mangel wurzel, 1,800 bushels; 3¼ acres carrots, 1,600 bushels; total, 3,400 bushels, at 10 cents—\$340—leaving, at this low estimate of price, a deficiency of only \$68, to pay for the permanent improvement and all the expenses of cultivation, from the first year's crop. The value of mangels in England is generally considered 50 per cent. more than turnips. This crop also was produced without any manure, (and from the defective method of sowing or other causes fully one-third of the seed missed,) but, as I wished to test the benefits of thorough draining, I think it has exhibited a very satisfactory result without. This field I shall sow with spring wheat this year, and I hope to be able to give an equally favorable report next harvest. It cannot be said that the low cost of the labor done last spring and summer was owing to the small demand for labor, for all of my men earned above the average of wages during the whole time; one set of men earned 4s 11½d, wanting a fraction of \$1 per day; another nearly 4s, and a third 3s 8d; others again, more unused to handling the necessary tools, earned still less, but this was owing to their own want of skill, which practice of course would soon have cured. The most advantageous manner in which the work can be done is for the men to work in gangs of two each, and when there are a number of gangs at work, for one man to be kept laying in the tiles, which he can easily do in favorable ground for twenty diggers; in ordinary good clay lands a handy workman will easily cut and fill five rods per day. All of these statements, which may be relied upon as strictly correct, conclusively prove that the system of thorough drainage, in point of immediate expense and ultimate profit, is as well adapted to Canada as to the old countries; and my own opinion is, that the effects will be more marked in the former than in the latter.