

2nd March and 17th April. This work was all done by the piece, except carting and laying the tiles, and as I consider it a thorough specimen of the manner in which such work may be done economically to the land owner, and affording a full remuneration to the labourer, I subjoin a more particular account. The field lies very advantageously for draining, having plenty of slope and, except in one or two places, no veins of sand were found to impede the work. Nearly the whole of the land was of a very stiff clay, the upper portion of it especially, nearly eighteen inches of the bottom having occasionally to be removed with a pick axe, so that I allowed the men to run the upper third of some of the hardest of the drains only from 12 to 15 inches deep, the remainder of the branch drains being four feet, and the main drains 1 foot 6 in., and 5 feet deep. The land drained consisted of 15 acres, embracing a garden and orchard $1\frac{1}{4}$ acres, and a field containing $12\frac{3}{4}$ acres, which had been ploughed into nine pace lands the previous autumn. This was rather closer than necessary perhaps, but no disadvantage. The work was commenced on the 2nd of March, the ground being quite solid with frost every where except in the open furrow. These were broken into without much difficulty and the tiles laid therein.

The total cost was as follows :

1279 rods digging and filling at	
10d. cy.....	\$213.17
141 " " at 1s. 0d.	28.20
123 " " at 1s. 3d.	3.18
5200 $1\frac{1}{2}$ inch tiles at \$6.00.....	31.20
17780 2 " " 6.50.....	115.57
1920 3 " " 12.00.....	23.04
250 4 " " 20.00.....	5.00
330 5 " " 30.00.....	9.90
263 days labour laying tiles at 75c.	20.06
6 days extra work.....	4.20
Tools—wear and tear and repair..	12.25
Carting tiles from Yorkville, four miles, and distributing	48.30

1433 rods, say $4\frac{1}{2}$ miles, at say
 \$114.12 per mile.....\$511.07
 \$34.27 for $95\frac{1}{2}$ rods per acre.

About twenty different men were employed, and of these only three had done any work of the kind before, yet in doing 1163 rods at 10d.; 101 rods at 1s., and 13 rods at 1s. 3d., eight gangs of men earned by 303 days work, 59, 62, 67, 70, 77, 79, 84, and 37 cents per day respectively for each man in each gang. At the latter part of the work, several of the men earned a little over a dollar per day, averaging six rods per day.

This ground, with the rest of the farm, was rented on shares, and was planted with potatoes. The upper part of the field yielded at the rate of 210 bushels per acre, but the lower part, though naturally the richest land, from being

encumbered with some very heavy elm and other trees, did not yield nearly so well. The crop moreover, was carelessly cultivated, not having been worked amongst between the last harrowing, after the potatoes came through the ground and their being earthed up with the plough, which too was done when they were in blossom. A very different yield would have been the result of proper attention between those periods. In the ease and satisfaction one experiences in the capability of thorough and deep cultivating land, at all times after draining, that makes the treatment especially profitable, particularly the ease of clay land, which thus becomes not only dry but thoroughly aerated, whereby, as it were, decomposed through the action of the atmosphere admitted into it, the soil being so at all times and seasons in a mild, friable condition, well fitted for the germination and growth of any seed or plant, be it naturally ever so tender and delicate when young or at any other period.

As to the results of drainage on my own land I have been disappointed in one particular which I will remark upon presently, but in all else I was certainly over sanguine. In every other respect however, it has been eminently successful. I have been enabled to commence work upon my land of all qualities and in all situations high and low, clay and sand together, the moment the frost left the ground, in fact one I harrowed before the frost was entirely gone. Upon all I have set my ploughs and other implements to work whenever it was not absolutely raining, whether it was upon clay or sand, high or hollows. This alone will be recognized as an immense advantage. No water is ever seen the surface of any of my land, though I limit the width of my feelers generally to two paces, for the convenience of turning on the headland, and in no case do I draw a water furrow across the field or open any between the lines after seeding. I have also grown large crops of swedes, mangolds and carrots on clay lands formerly so stiff that potatoes could hardly be taken through the crust, and on low parts of the fields where formerly Indian Corn seed would rot in the month of June, and turnips would sustain but a sickly growth though sown near the water and water weeds of the most noxious description would choke out the stronger grain crops. I have grown very large swedes, and spring wheat straw $4\frac{1}{2}$ feet high, of the clearest and brightest yellow hue and of almost flinty hardness, each particle being laid though of such vigorous growth. Of the results upon the growth of wheat I have spoken above. This was grown upon land which to the present day has been ploughed but twice—once for the peas and draining, and once after harvest, preparatory to sowing the fall wheat seed; and though a portion of the field was of a sandy, mucous description, and the straw was six feet high, &c.