

13th. The perfect drainage of the foundations of the barn, and every building on the farm.

14th. A steam-house to prepare food for cattle. I am thus particular in detail, because it is from each of the above branches of expenditure that some portion of remuneration is expected. But, during the progress of my undertaking, I have been warned, entreated, and dissuaded by my farming friends, who protested that a profitable return for such an enormous expenditure was impossible; my calculations, however, were made, and mere assertions without facts and figures weighed nothing with me. Although the operations were only commenced early in 1843, the results, as far as they go, are gratifying and convincing. As one instance of success, a field of oats, sown on the 16th May, after drainage, was harvested and stacked, before another (sown two months earlier on better but undrained land) was ready to cut. Hereafter you shall have detailed statistics of every department in which saving is effected and increase produced. In a moral and social point of view, these improvements have acted beneficially. They have excited the energies of the tenant and his laborers, stimulating them to think, compare, and improve. They have awakened the attention and curiosity of the neighboring farmers, who are watching the result, and already have they caused many undertakings in drainage, which otherwise would not have been thought of. Had I invested my money in the funds, there would have been an end of the matter; but now I have the satisfaction of having fulfilled a public duty (without injury to myself) by calling into action temporarily and permanently, a considerable amount of labor. I conceive that the highest order of charity, which, by providing employment to the willing laborer, confers a favor unseen, and leaves uncompromised (his most valuable privilege) his self-dependence.

If every one who has the means follows my example, where requisite, there will be little need to complain of the want of employment for our peasantry or our capital. Whilst every thing has been done for the farmer's profit and comfort, the cottagers have not been forgotten. A few gutters and pipes to their residences, and some drains in their gardens, have rendered the former dry and healthy, and the latter productive; and this at the trifling cost of a few pounds. I may be asked, "what can you as a Londoner know about farming?" I will answer, "I always loved the beauties of nature, the pure air of Heaven, the sports of the field, and the hospitality of our honest yeoman. I have seen one farmer making a fortune, and his next neighbor losing one. I have seen one field all corn, and another nearly all weeds."

I asked, "how is this?"—enquired into the causes—noted the results—obtained from all the best farmers and all the best agricultural books within my reach, every information bearing on agricultural pursuits—practiced on my own little garden, on a small scale, a variety of experiments; and after carefully weighing the evidence,

I come to the conclusion, that want of drainage, both in land and buildings, waste of manure, shallow ploughing, and short leases, are amongst the greatest curses to this country; and I, as far as my individual means will permit, am resolved on remedying them.

I am, Sir,

Your obedient Servant,

I. J. MERRI.

4, Leadenhall Street,

London, March 15th, 1844.

P. S. As Tiptree Heath is notorious for poor land, and as the Essex farmers, generally, are extremely sceptical as to these improvements answering, I would recommend their inspecting the crops (there will be no long fallow) about July next; and then, having the facts before them, they will be enabled to draw correct conclusions. I may as well add, it is intended to trench-plough and disturb the soil to the depth of fourteen or sixteen inches. The implements used on this farm are, Crosskill's clod-crusher roller and liquid manure cart. The threshing-machine is constructed under my own direction, by Mr. Bewley, of Chelmsford, on the Scotch principle, with rakes, chaff-cutter, and corn-bruiser.

LETTER II.

THE DRAINAGE AT TIPTREE-HALL FARM.

Sir,—As I have frequent enquiries, I will endeavour to give you a tolerably succinct account of my draining operations at Tiptree Hall farm.

The land is of such various qualities, and so particularly situated thereby for the retention of both top and spring water, that the Essex people considered it never could be improved even to become of tolerable goodness.

About two-thirds of it was a strong yellow loam subsoil, in a state between putty and bird-lime, according to the season, here and there mixed with a hodge-podge of stones, to which its attachment was so affectionate that there was no separating them, and it was only by the constant use of water that the land drainers could get their spades in or get rid of this adhesive substance; at intervals might be found veins of silt (the reverse of adhesive,) and here and there the soil would assume a rusty appearance, indicating iron, with a blueish or slaty character: then a patch of gravel occasionally amongst the loam in which would rise a small weak spring, sufficient, however, to ruin the crops in its immediate neighborhood. Over this subsoil and between it and the cultivated soil, was a hard, dry and impervious pan, formed of the subsoil, but hardened and rendered solid by the heat of the sun and the action of the plough-sole. The soil itself partook in some considerable degree of the nature of the subsoil, being, however, ameliorated by mixture of manures and by cultivation. Still so great was the fear of the wretched subsoil that the pan was never disturbed, consequently, there being but nine or ten inches of cultivatable earth with an