

pipes from being forced up by the boiling waters and sand; when loaded, the arches were removed by a lever, the mouths of the pipes being carefully stopped with hay, till the next length of pipes was laid in the next arch (two always being in use, one in front of the other.)

The result is, that one such drain laid perfectly dry four acres of bog (having a smaller spring over or across it;) the first drain runs *permanently* 30,000 gallons every twenty-four hours, and several others nearly as much. It has laid our neighbour's wells dry, a quarter of a mile off (being in a bed of sand, below their level). The land (which has been double spitted) is now always perfectly dry, although previously dangerous for cattle and entirely worthless.

In conclusion, allow me to say, I have derived most valuable information in draining from those excellent and standard works on Agriculture, "Stephens' Book of the Farm," "Loudon's Encyclopædia of Agriculture," and "Morton on Soils." There may be found ample and satisfactory evidence and matters of fact in every branch of draining. It is with extreme regret I frequently see money completely wasted by placing tiles without soles, and pipes without stones, and temporary and imperfect draining by bushes. That soil in a few years becomes absolutely much worse than it was originally, for when the drains choke, there is a much larger accumulation of water to the destruction of the crops.

I hope that in time to come, farming will be treated as a science, and that there will be as much uniformity in cultivating land as there is in manufacturing cotton. That can only arrive by our young farmers deriving an uniform agricultural education—the mechanism for which does not at present exist. Let us hope it may hereafter, and that whilst we have collegiate education for the learned and other professions, we shall at least have agricultural universities and apprenticeships. There can be no doubt that agriculture is the basis of society—the most paramount interest in a pecuniary point of view—the regulator of currency and manufactures, which are subservient to it. If we want a proof of this, let us consider that the stomach cannot wait a day; its claims are paramount, and to hunger must succumb all our other enjoyments, whether of manufactures or luxuries.

Let every Landlord and every Tenant improve their land, where opportunity exists, and the Anti-Corn Law League may visit other countries, whose fear of our exportations will then be great. For it is quite clear, that if all the land in this country that required it, were perfectly drained and cultivated, we should be quite as able to export our superfluous corn and meat as our superabundant cotton; a result devoutly to be wished, when we consider the effect of ample food and employment to our laboring population in a moral, physical, and social point of view—to say nothing of the immense pecuniary advantage of employing our capital at home, instead of lending it to other nations, to enable them to compete

with our own already insufficiently employed countrymen.

I am, Sir,

Your obedient Servant,

I. J. MERRI.

P. S. As ten pounds per acre is deemed extravagant by the Essex gentlemen for permanent drainage, the following calculations will prove it to be the cheapest:—

	s.	d.
Twelve score rods per acre, done temporarily with scuds, bushes, &c. at £4 per acre, calculated to last ten years.		
Interest on £4 at 5 per cent,	4	0
Principal sunk in ten years is 8s. per year	8	0
	12	0
Annual charge		
Interest on my permanent draining at 5 per cent.		
Annual charge	10	0
Annual saving per acre in favor of my plan	2	0

We find, during the last week, that while the stone and pipe drained part of one field is perfectly dry and friable, the scud-drained part of the same field, done the same depth, distance, &c., (about three acres,) is a fortnight later in its drying. This is an important fact worth noting, the soil being exactly the same. It is well known that after six or seven years, the scud and bush draining becomes annually less and effective. If so, how pre-eminent must be the permanent drainage in gain as well as in saving.

I will say nothing of the calculation that one extra sack of oats would pay this drainage charge, besides twenty other advantages that might be named. Sometimes a whole crop depends on a day or two—witness the clover seed of 1842, carted into the yards for manure, all for drainage, which would have matured them a week or fortnight earlier.

NEW YORK STATE AGRICULTURAL SHOW.—We beg to inform our friends that the annual exhibition of the New York State Agricultural Society will take place on the 16th and 17th inst. at the City of Utica. We doubt not but that this exhibition will be well sustained by the wealthy and enterprising farmers of central New York.

We hope to be present at the above exhibition, and shall take notes of such particulars as would be likely to interest our readers. Those of the Canadian farmers that are anxious to have a Provincial Agricultural Society established in this province, would do well to attend the New York State exhibition, by which means they could better judge of its adaptation to our circumstances.