The next season, I stumped, cleaned, ploughed, fenced, and sowed my field, which is now invaluable. Following up my experience next season, and finding the blue clay stratum, in both swamp and cleared fields, I fell upon another plan, (borrowing the idea from an Irish laborer, who said that "pipes," as he called them, were covered with "sod" in Ireland.) I got a narrow spade bent round in the blade, about four inches wide in the bit, like a gouge, with which I cut a *groove* in the bottom of the drain, about 4 inches wide and 4 deep, leaving a good shoulder, at least 4 inches on each side; on this I laid a common saw-log slab, and, if narrow, two of them, the ends meeting square and close; then straw or brush to prevent the soil from falling into crevices until settled down; and this *groove*, after two years' experience, I find to answer admirably, running a stream of clear water summer and winter. *The winter draining is the whole secret.* The *groove*, of course, is only suitable in clay, but wood or stone is advantageous in any soil, and wood will last an *unknown* time under ground, particularly in clay.

Now, why would not this plan, or something similar, answer well in Lower Canada, where it is generally a clay bottom? Surely, stones, lumber, slabs, *boards*, or something can be had without very great expense. I have often observed your open drains in Lower Canada, which I consider the next thing to a nuisance, for, in many instances, they only dam the water on fields. I would not *now* have open drains if they were to cost me nothing, and, where I had them heretofore, I now dig them deep and groove and cover as above described. *Let me repeat again, the great secret is in winter draining below the frost!*

Now then, as to the expense. I find, on an average, that by cutting two drains across a field of 9 or 10 acres one way, and one cut across the other way (lowest ground always,) it will, on my land, drain sufficiently; drains, say about 2½ feet wide at top, 12 to 14 inches in bottom, and 3½ feet deep, this I find to cost me about 4 to 5 dollars an acre on the area of the field. By these means I bring land to cultivation which is fresh and vigorous, and without draining I could not cultivate at all; but not only that, but I believe, generally, (and my farmer is now beginning to be convinced of the fact) that I get back my outlay in most cases in the *first crop*—and certainly in the second. I may add, that I am now preparing to redeem a third additional field from the forest, but my first step, before I put in an axe, is *draining*, I can clear in less time and much less expense, but, of course, my bush draining is a little more expensive.

It is needless, Mr. Editor, to tell you personally the advantages of draining, for I can testify to your zeal, for many years, in keeping the subject before your readers. In my own case, I can aver most truthfully, notwithstanding all I ever read on the subject, that the improvement is far beyond what I anticipated. Under such circumstances, is it not deeply to be regretted, that so many of our worthy, industrious Yeomen, and many who can well afford it, should still be in the dark with regard to the value of this fundamental principle in good farming, viz., *draining*.

Respectfully yours,
AN UPPER CANADIAN.

Bytown, July, 1852.

METEOROLOGICAL RESULTS FOR JUNE, 1852. TAKEN AT ST. MARTIN, ISLE JESUS, BY CHARLES SMALLWOOD, M. D.

BAROMETER.	inches.
Mean Reading corrected and reduced to 32° F.	29·489
Highest Reading corrected and reduced to the 13th day	29·939
Lowest Reading corrected and reduced to the 9th day	28·727
Monthly Range	1·112
THERMOMETER.	
Mean Reading of the Standard Thermometer, F.	66·12
Highest do Maximum do the 15th d.	100·00
Lowest do do the 5th d.	28·00
Monthly Range	72·00
Mean of Humidity, Saturation begin, 1·00	·770
Amount of Evaporation, in inches	3·450
Amount of Rain in inches	5·892
Rain fell on 15 days, and was accompained by Thunder and Lightning on 6 days.	
Most Prevalent Wind	W.
Least do	E.
Most Windy day, the 9th day, Mean Miles per hour.	31·540
Least do the 13th day, do	0·923

NATIONAL AGRICULTURAL SCHOOLS.

Education is the foundation of all social, political, and agricultural advancement in the great cause of progressive civilization; and we regret to perceive that it is so much neglected by the agricultural community.