

AGRICULTURAL.

DRAINING.

[From the Complete Farmer.]

Drains used in farming are of two kinds open and covered. Drains should be of a size and depth proportioned to the extent of the swamp and the probable quantity of water for which they are designed to be channels. They should generally be carried through the lowest and wettest part of the soil, although it would be necessary, in order to effect that purpose, to deviate from straight lines. Open drains sometimes answer the double purpose of conveying off superfluous water and of inclosing fields; but they make a hazardous and inconvenient fence without the addition of a bank, hedge, or railing. The Farmer's Assistant says, 'When a ditch is made for a fence, it ought to be four feet wide at the top, one or less at the bottom, and about two and a half deep; with the earth all thrown out on one side, and banked up as high as possible.' Sir John Sinclair states, that 'it is a general rule regarding open drains, with a view of giving sufficient slope and stability to their sides, that the width at the top should be three times as much as that which is necessary at the bottom, and in the case of peat-mosses or soft soils, it should be such as to allow the water to run off without stagnation, but not with so rapid a motion as to injure the bottom.'

But before you attempt to drain a piece of land, it will be well not only to calculate the cost, but to ascertain the nature of the soil which it is proposed to render fit for cultivation. If the subsoil or under layer be clay, the swamp may be worth draining, though there should be no more than six inches of black soil or mud over it, for the clay and the mud mixed will make a fertile soil. But if the subsoil or under stratum be gravel or white sand, it will not, in common cases, be best to undertake draining; unless the depth of black mud be as much as from fifteen or eighteen inches deep; for the soil will settle after draining, and be less deep than it was before. But the situation of the land to be drained may authorize some variations from these general rules.

The manner of draining a swamp is as follows: Beginning at the outlet, pass a large ditch through it, so as mostly to cut the lowest parts. Then make another ditch quite round it, near to the border, to cut off the springs which come from the upland, and to receive the water that runs down from the hills upon the surface in great rains. These ditches should be larger or smaller, in some proportion to the size of the swamp, the shape and size of the hills which surround it, and other circumstances, which might tend to greater or less quantities of water being occasionally or generally led to the ditches. If the swamp be large, it may be necessary that some smaller cross drains should be cut in several of the lowest parts. The bottom of the main ditches, when the soil is not of an extraordinary depth, must be lower than the bottom of the loose soil; otherwise the soil will never become sufficiently dry and firm.

It is said by Sir John Sinclair, (Code of Agriculture, page 182.) that in all drains it is a rule to begin at the lowest place and to work upwards, by which the water will always pass from the workmen and point out the level. This enables the laborers also to work in coarse weather, and prevents their being interrupted by wet so early in the season as otherwise might happen.

The mud and other materials which are dug out of a ditch or drain should not be suffered to lie in heaps or banks by the side of the ditch, but should be spread as equally as possible over the surface of the drained land.— In this way, the matter taken from the ditches

will tend to level the surface of the swamp,— will, perhaps, serve in some measure for manure, and will not present any impediment to the passage of the water to the ditches. In some cases it may be advisable to transport the earth which is taken from the ditches to the farm-yard or the hog-pen, to form a part of that layer which good farmers generally spread over those places in autumn, to imbibe liquid manure, or make into compost with dung. In many instances, we are told, that the earth thus dug out of ditches is thought to be worth enough to pay for the expense of digging the ditches.

The following communication on the subject of under-draining is from the New England Farmer, vol. x:

Underdraining.—In a late number of the New England Farmer, my friend Judge Buel, in an article on 'underdraining,' was pleased to speak in favourable terms of my practice in this species of improvement, of my culture in general, and to ask for some communication on the subject. As no one in our country has more successfully blended theory with practice in the various departments of husbandry, than Mr. Buel, I appreciate this notice from one so competent to make improvements, and so happy in his manner of detailing them to the agricultural community.

As regards underdraining, and the many benefits resulting from it, my observation and experience fully corroborate all Judge Buel has said in its favour; indeed, without this salutary and simple operation, no inconsiderable proportion of many valuable districts of our country must continue little better than waste. It is generally total loss of labour to the farmer who attempts to cultivate wet lands in our rigorous climate, and by draining, these useless inhospitable acres have been found of the kindest and most productive character.

Having a surplus of stones on my estate beyond what fences require, I use the smaller and ill-formed for drains; they have the advantage of piles in durability and of tiles in economy. My drains are, for the most part, three feet in depth, two in width at top, sloping to one at bottom. The bottom stones are largest, and are carefully placed to allow the water to flow freely beneath, while above the small stones are thrown in at random, so that when levelled they are beneath the plough. Over these swingle-tow, shavings or straw may be thrown, after which the earth can be replaced by the spade or plough so as to present a rather higher surface than the grounds adjacent, and the business is accomplished. It is very essential that the descent be easy, neither too quick nor too slow, and that all surface water be excluded, as it would speedily choke and destroy the underdraining. I estimate the average cost of such drains at sixty-two and a half cents the rod. It should be remarked, that underdraining is adapted to lands presenting sufficient declivity to carry off the springs, and it is only the underwater that is meant to be drained in this manner, while open ditches are adapted to the bottom lands for the conveyance of surface water. I will state what appears to me the prominent advantages that the cultivator may promise himself by a thorough system of draining.

In the first place, he creates, as it were, so much additional terra firma, and adds essentially to the health of all around him, by correcting the ill tendencies of excessive moisture. He can cultivate reclaimed lands several weeks earlier and as much later in each year than those that are unreclaimed, his crops are better and more sure. The labour of after tillage is much diminished. The stones that impede the plough and scythe are removed, and not the least essential benefit is the constant supplies of water which may be insured in any

field inclining to moisture, which, with reference to animals, will, as a permanent convenience and advantage, fully compensate the expense of drains.

I have just put down a field of wheat which has required extensive underdraining. This field has required two hundred and fifty rods of stone draining, and I hope to be remunerated the whole expense in the surplus crops of the two next years, to say nothing of the pleasure of witnessing the finest grains and kindest grasses taking the place of bul-rushes and wild grass.

I am, sir, your most obedient servant,
HENRY W. DELAVAN.

PICTOU PRICES CURRENT.

CORRECTED WEEKLY.

APPLES, pr bushel	none	Hay	40s
Boards, pine, pr m	50s a 60s	Herrings, No. 1,	30s
" hemlock	30s a 40s	Mackarel,	none
Beef, pr lb	3d a 4d	Mutton pr lb	3d a 4d
Butter,	8d a 9d	Oatmeal pr cwt	26 a 27s
Cheese, per lb		Oats	none
Coals, at Mines, pr chl	17s	Pork pr bbl	80 a 85
" at Loading Ground	17s	Potatoes	2s
" at end of Rail Road	17s	Salt pr hhd	10s a 12s 6d
Coke		Salmon,	8s 6d
Codfish pr Ql	12s a 16s	Shingles pr m	7s a 10s
Eggs, pr doz	6d	Tallow pr lb	7d a 8d
Flour, n s	none	Veal pr lb	3d
" American s	none	Wood pr cord	12s

HALIFAX PRICES.

Alowives	22s	Herrings, No 1	20s
Boards, pine, m	50s a 55s	"	2 15s
Beef, best,		Mackarel, No 1	none
" Quebec primo	50s	"	2 40s
" Nova Scotia	45s	"	3 22s 6d
Codfish, merch'ble	16s	Molasses	1s 10d
Coals, Pictou,	22s 6d	Pork, Irish	none
" Sydney,	28s	" Quebec	90s
Coffee	1s	" N. Scotia	85s
Corn, Indian	5s 6d	Potatoes	2s
Flour Am sup		Sugar,	35s a 37s 6d
" Fine	46s	Salmon No 1	70
" Quebec fine	none	"	3 65
" Nova Scotia		Salt	10s a

TO BE SOLD,

AT PUBLIC AUCTION,

On the Cross Streets of Pictou, on Thursday the 21st September next, at one o'clock, p. m., under an order of His Excellency the Governor, and His Majesty's Council:

TWO LOTS OF LAND,

Formerly the property of John McDonald (Sandy) of Merigomish, deceased, situate on the south side of the harbour of Merigomish, bounded on the east by the lands of Mrs McVicar, on the south by the lands of Sir Charles M Wentworth, and on the west by the lands of William McDonald, and on the north by the harbour of Merigomish. Each lot contains

37½ ACRES, MORE OR LESS,

and of each at least ten acres are under cultivation.

TERMS will be a deposit of ten per cent of the purchase money, at the time of the sale, and the remainder on the delivery of the Deeds.

THOMAS G. TAYLOR,

Administrator.

Pictou, 19th August, 1837.

HARDWARE, CUTLERY, &c.

DEALERS in Hardware are respectfully informed that they may be supplied with Goods from the Manufactory of Hiram Cutler, Sheffield, late Furniss Cutler & Stacey, and established by Thomas Weldon in 1780, on application to Messrs John Albro & Co., Halifax, where

A SET OF PATTERNS

may be inspected, consisting of

SAWS, FILES, TOOLS, DRAWING KNIVES,

And every description of Cutlery.

ALSO: — SAMPLES OF STEEL.

N. B. Those Houses who have been accustomed to have Goods from the above Firm, through the medium of their friends in England and Scotland, may have the advantage of inspecting the patterns, and get transmit their orders as formerly.

Halifax, February, 1837.

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