that is abounding in moisture. The former works kindly, is easily wrought, when wetted with rain, soon dries and seldom cakes; whilst with the latter, it is often difficult to observe where the harrows have passed over it, until both horses and man are tired out with fatigue—when, perchance, some passing shower comes over and puts a stop to the proceedings, and causes a delay which often results in the loss of the crop. Who has not remarked the broad, dark green foliage of all our cereals upon the drained lands, compared with the narrow, yellow tinged leaves and stunted growth observable, where the poisonous matter is pent up, and checking the growth of the feeble plant. The former is prepared with a strong stem and abundant foliage to withstand against the summer drought; whilst the latter is immediately scorched up, and, at best, returns but a feeble yield. Of all the improvements upon the Farm, it is the first that should be taken in hand when necessary. There is no outlay of money that can be made, that will return a greater and more certain profit, than underdraining where necessary. A farmer may invest money in purchasing improved stock, but death or accident may step in and cause a loss. He may invest money in artificial fertilizers, but an unusually dry season may prevent their action. He may purchase seeds of the best obtainable varieties, and yet be disappointed in their return, owing to his land not being in a healthy state to receive them. In short, he may take a step forward in any one of the many improvements of the present age, and yet may meet with losses. But in underdraining, neither the season, nor any one of the elements, nor the times, can affect them. He can bid defiance to the ravaging disease, to the hot, burning sun, and the deluging rain, none can strip him of his enterprise—it lies safely in the earth; it is money invested in a bank that cannot break.

We have thus far called the attention of our readers to the subject of underdraining. It is our intention in the following numbers of our paper, to treat the matter fully. We will give the best information for carrying it out in a thoroughly practical manner.

CHAS. ELLIS.

To the Editor of the Farmer's Advocate.

## CROPS IN NEW BRUNSWICK.

LONDON, January 1870.

MR. WELD:—Dear Sir: Frequently since my return from New Brunswick, I have been asked by parties both in this city and in Toronto, if the farmers in that section can raise wheat, or if their crops amount to anything, as the prevailing opinion with many people in Ontario is, that the land down there is nothing but sand, rocks and barrens. I can not imagine how such an erroneous impression has got possession of the minds of an intelligent reading public. A certain shiver comes over many when the names of the Lower Provinces, now confederated with Canada, are pronounced, as being an icy rock-bound coast, incapable of vegetation, while its inhabitants are compelled to subsist on fish. Now, while they have some stony and some rocky land, and an abundance of fish, they have also fine fertile land, capable of raising crops, not to be surpassed by the best farms in Ontario. During the past summer I traveled over the greater portion of both New Brunswick and Nova Scotia, and was surprised at the extent of cultivation, fertility of soil, and largeness of yield in various sections of country. For the information of your readers we will give the product of a farm, owned by Ferguson, Rankin & Co., on the Bay de Chaleur, 250 miles north of St. John. This farm consists of 300 acres, 50 of which is still wild, some clay and some sandy loam. This farm is in a high state of cultivation, still, there is an abundance of equally as good land in the same County. The following is a list of the produce raised on it the past season, which speaks for itself, viz:

300 tons of hay, 2000 bushels of oats, 1000 bushels of wheat, 100 bushels peas, 100 bushels buckwheat, 80 bushels barley, 25 bushels beans, 7,500 bushels turnips, 4,100 bushels potatoes, 345 bushels carrots, and 66 bushels mangel wurtzels.

The above crop netted $8,075. This Mr. Editor, is not an isolated case, but is an instance of what can be done, very far north, in that cold, fishy country.

Yours, B. DAWSON.

To the Editor of the Farmer's Advocate.

## CHEVELIER BARLEY.

MR. WELD:—Dear Sir—I sowed the 135 pounds of Barley on the 8th of last May—it being the product of one pound raised the year before. I sowed it on Fall wheat stubble, ploughed deep in fall and gang ploughed in the spring; harrowed fine, then rolled, and sowed with a drill on what I supposed to be three acres, it being forty-five pounds of seed to the acre. I sowed on strong, clay soil, well drained. It soon came up and stooled out wonderfully, there being from ten to thirty stalks from one root. It soon covered the ground and proved to be a heavy crop, growing about ten inches higher than the old two-rowed barley growing along side of it in the same field, and no difference of soil and sowed at the same time. The quantity of old barley sowed was one and a half bushels per acre. The spring being cold and backward I sowed it about the 8th of May, and cut it about the same time in August. I should have cut it six days sooner, but for a heavy rain, followed by several showery days which rendered the ground unfit to take the reaper on it, and drove the barley down, bleaching and changing its color very much.

I cut it with a "Self Raking Reaper." The bottom being smooth, I cut it very close to the ground, and yet, with all my care, many of the heads were cut off and lost. I have no doubt but twice the amount of seed sown, was lost in harvesting. After threshing, I had 190 measures, well heaped up.

It yielded 212 bushels by weight. A struck bushel weighed fifty-four pounds, being six pounds more than common barley, and averaged a little over seventy bushels per acre. I have not tried the Chevelier barley on any other than clay land, yet I am of the opinion that it would do well on light soil, as it grows taller and much longer in the head than any other variety I have yet seen. The grain is larger, and as white as six rowed. It has proved itself, thus far, to be adapted to our soil and climate.

We also tried salt, as a manure, on Fall Wheat. Sowed the salt immediately after the wheat; tried it in three fields; could see but little benefit; thought it a litule lighter. I intend trying it in the spring on Fall wheat. I will sow it when the blade is dry, that the salt may not stick to it. I believe it would not only hurry the ripening, but be destructive to insects that infest the crops. The *midge*, that has been so destructive to the wheat crop, is fast disappearing.

We grow the Tredwell wheat. It does very well, but we prefer the Souls wheat to any other. Our grain crops, of all kinds, have yielded a fair reward for labor. Roots of all kinds, and potatoes rotted on low, heavy land. The Chillies stood the wet season the best. Now I should like to know one thing in reference to Chevelier barley. Will it malt with six rowed barley? or does it take longer time? Please answer.

Respectfully Yours,
BENJ. WEST.

Bondhead, Jan. 7th, 1870.

[The Chevelier will not malt with other barley; it takes two days longer to malt it.]—ED.

To the Editor of the Farmer's Advocate.

## TICK DESTROYER.

Sir.—From what I have seen and done with my sheep this winter with good results, I think many will lose more or less of their sheep, especially lambs, before shearing time, with Tick; unless they apply a pound of dry Scotch snuff to every 20 sheep. Apply between the wool with a small pepper box, as near the hide as possible, wherever there is a tick, though I prefer Miller's Tick Destroyer. After shearing, I have tried it with better results still; though the last time, there was a chilly wind. I feel confident it checked the growth of the lambs. I shall choose a warmer day for it. But I would advise your subscribers to examine their lambs very soon, and if ticks are getting numerous, apply the snuff without delay; and should there be any tick at shearing time, we ought to use the Tick Destroyer also.

L. E. BUSH.

A receipt for cankered sore mouth, more common among children than older people, but will answer both, used in the same way. Copperas and alum, each half as large as a hickory nut with the shell off, burnt on a stove to a sinder; pulverize together and mix with honey; apply with swab 3 times a day. I have used this receipt in my own family with great success, and can with confidence recommend it to anyone troubled with a sore mouth.

L. E. B.

To the Editor of the Farmer's Advocate.

## Value of Salt on Grain Crops.

Sir:—As you are asking for useful communications of value to farmers, I now make a few remarks on the above subject. Last year I sowed a ten acre field, from which I had taken a crop of peas the previous year, 4 acres in fall wheat and 6 acres in barley. I put two barrels of salt on the field at spring seed time and at harvest. Both the barley and wheat stood remarkably well, while the grain in my other field, and all round the neighborhood was badly lodged. The grain was good and plump, in fact the barley was the best in the neighborhood. This field was full of wire worms, but not a blade was damaged with them. I have also tried the salt in previous years, and found it most destructive to the wire worm and other grubs; and stiffens the straw of the grain, and I feel satisfied that it pays well for stiffening the straw alone.

G. YOUNG,

Appin, Jan. 15th, 1870.