

The Field.

Prize Essays.

To the Editor of THE CANADA FARMER:

SIR,—I do not know whether you admit into your journal things "old" as well as "new," but trusting you may sometimes do so, I enclose you a copy of the oldest Canadian Essay on the cultivation of wheat that I have seen. There was an Agricultural Society formed for the County of Northumberland on the 17th May, 1828. They held their first show at Colborne on the 19th October, 1829, and with commendable liberality gave (among other prizes) two for essays on the cultivation of wheat, of which the following received the first prize—an example which has not been often followed by our Agricultural Societies. The liberal-minded men who formed this early society, amidst many drawbacks and discouragements, without any Government grant to assist them, could little foresee how successful their efforts would ultimately prove. At their first show they awarded twenty prizes, amounting to seventy seven dollars, while in 1862, the latest return I have seen, there were awarded over \$2,030 in prizes, by the different Agricultural Societies in the county. W. R.

The following is the Essay referred to by our correspondent. We publish it both on account of its own interest and merit, and in the hope that our Agricultural Societies may take the hint, and include in their prize list premiums for the best essays on specified agricultural subjects:

ESSAY ON THE CULTURE OF WHEAT.

BY MR. JOSHUA WEBSTER.

GENTLEMEN.—As I am not an officer of this Society you will not expect a complimentary address from me; and as I am not versed in classical lore I shall not attempt to tell you what great men of ancient or modern times have done or ought to do. Neither shall I, as I might in writing on agricultural pursuits in general, take notice of its having been the first and still continuing to be (notwithstanding the scorn of the fop) the most honorable, healthful, pleasant, and independent pursuit that man can engage in; but I shall leave these subjects to abler heads, and hands more used to handling the pen; as mine are more accustomed to wielding the axe or guiding the plough.

I shall endeavor, in a plain farmer style, to confine myself exclusively to the culture of wheat, and to place within the reach of those in the humbler walks of life the possibility of success in this most important branch of Agriculture. And, in submitting to you a few ideas on this subject, my observations will be such as I have tested by actual experience.

I consider the art of cultivating wheat in a great measure consists in knowing how to prepare the soil. I shall in the first place take notice of this part of the subject—and shall be quite particular on the clearing of new land and the preparing of old. As a great part of our country is yet in a wilderness state, and quite a share of the wheat brought to our markets is grown on new land, I deem it important that our enterprising young men who are clearing away the forest, should know how to profit by their hard labor. If you wish so to do, attend to the following rules:—Let the underwood be cut in the autumn, before the leaves fall, and the timber in the winter or early in the spring. This will insure a good burn, which is the first thing requisite for a good crop. Do your logging in the month of June; and if you wish to make money, do it before you burn your brush, and save ashes; these will more than pay you for clearing the land; and by burning at this season you will attract a drove of cattle about you that will destroy sprouts which may be growing. Do not leave more than four trees on an acre, and girdle these in the full moon of March, and they will never leaf again. Thus you may have your land prepared for seed before harvest.

In this way you may drive your work, and not have your work always drive you. But if you are chopping when you ought to be logging, and logging when you ought to be sawing, you are always in a hurry; and it is very true that what is done in a hurry is ill done. The consequence is, you lose your ashes, and from being out of season in sowing, your crop will usually smut or blast, and the saying of Solomon is well verified, that he that does not improve seed-time may beg in harvest. On turf land, if it is strong, and you wish so to do, you may rear a crop of peas without injury to your crop of wheat, providing your seed peas are perfectly clean; but for this your turf must be carefully turned over in the fall. But for summer fallowing, as it is termed, red clover turf is undoubtedly the best. If your land is worn, and you wish to recruit it, do not break it up until your clover gets in full bloom. But if your land does not need this, be sure to turn it over in May or June. Take a good plough, and steady team, have your plough rigged with a coulter and gauge wheel, and do not plough more than four inches deep; and be sure and turn the turf down, for your crop in a great measure depends on the first ploughing. Follow the plough with the roller, and then a light harrow lengthwise the furrows, then cross-plough as deep as you can. Let your land remain in this state four weeks; then apply a heavy harrow with a lively team crosswise the furrows, then cross-plough as deep as you can. Let your land remain in this state till seed-time, then level it with a heavy drag, and apply the seed. Always plough in your seed with a light plough, as this will enable the crop to stand both drought and frost better, having more root than if covered with a drag only. If your land is low, plough it in ridges about eight feet wide, that the water may drain off, pass a light harrow over it, and conclude by rolling thoroughly. I suppose that few persons will question the propriety of the above statements, but I am aware that much has been said and written upon the manner of preparing seed to prevent smut; but if I should happen to differ from the theory of learned men, I hope they will pardon my ignorance while they respect my candor, since I venture on such statements only as I have proved to be useful. It is of the first importance that seed be clean, for it will be impossible to grow a clean crop from foul seed. If possible, change your seed, or procure the growth of a different soil; much more depends on this than the distance it is removed. I am convinced that if it is removed from a strong to a weak soil, or from a weak to a strong soil, the distance is quite immaterial. Never sow your wheat when the earth is wet; better wait a week. If possible, sow old wheat, and you will have no smut; but if this is not possible, for old land prepare your seed in the following manner:—Put it in a cask with four quarts of clean lime to a bushel; mix it well while dry; cover it with warm water for three hours; then draw off the water, and in twenty-four hours your wheat, if kept warm, will be finely sprouted and dry, and may be sowed without any inconvenience. This will be a real benefit to your crop, as it will facilitate its growth, whether it entirely prevents smut or not; but I never knew smut when the seed was thoroughly prepared in this way. I have made several experiments of various methods which I saw recommended, one of which I will state. I sowed three bushels of spring wheat which was smutty, a part prepared as above, a part soaked in brine, and part dry. There was no smut in the first; about one-fourth in the brined, and of the dry near one-half; all sowed the same day. I never lime wheat to sow on new land, for this reason—every grain which becomes thoroughly dried by the sun never grows. Great pains should be taken in harrowing new land, it cannot be harrowed too much.

Commence sowing by the tenth, and have done by the twenty-sixth of September; if sowed earlier than this, the late spring frosts may spoil it; and if later, it will generally rust and blast. Do not harvest your wheat until fully ripe; if it shells a little you are no loser by it, you will more than make it up in the thrashing; and it does not require to stand in the field exposed to damage by rain, but may be put in the barn in fine order; and if there should happen to no smut, it will not injure your crops half as much as it would if you cut it green, and get it in the barn damp. Never employ a drunkard in your harvest; he will drink up one man's wages, waste another's, and hinder the other hands the time of another; thus you might have four good hands for the price of a drunkard. I shall notice but one thing more, and

that, though last, is far from being of the least importance. Indeed, it is that on which our whole prosperity as farmers depends, and that is a good fence; without this all our labor is vain. A poor fence is worse than smut, choss and cockle, altogether, as it not only spoils our crops, but spoils our cattle also.

These are my views on the culture of wheat; and while I have pointed out errors, I have shown remedies which are in every farmer's reach. And, I ask, what observer of the cause of the failure of our wheat crops would not in ninety-nine cases in an hundred impute it to the mismanagement of us farmers rather than to our excellent soil? Half clearing new land or clearing it too late, and half harrowing it, and poor, late, and shallow ploughing of old land, with foul seed, and bad fences, are causes which destroy more wheat crops than smut, frost, drought, mildew, insect, or rust; and are evils from which every man should be entirely free who deserves the name of farmer.

COUNTY of Northumberland, 1829.

A Canadian Rotation of Crops.

To the Editor of THE CANADA FARMER:

SIR—I have waited patiently for nearly two months expecting some of the scientific farmers of Ontario to discuss largely the merits and demerits of the rotation and rotting the turnips on the land as manure, recommended by your correspondent "Vectis." I was very sorry that a gentleman of Guelph, in a recent issue of the CANADA FARMER, disposed of the subject in such a brief manner. It is not my intention to find fault with "Vectis," nor criticize the observations of your Guelph correspondent, but I beg leave, first, to point out where the plan laid down by "Vectis" will not, in my opinion, suit the wants of this country, and, second, to lay before the farmers of Canada a rotation that I have adopted, which can be completely carried out without any additional expense, except, perhaps, adjusting the fences in order to make the fields as near one size as possible.

It is readily admitted by every intelligent farmer in the country that a good rotation is necessary as a help to keep up the fertility of the soil, and likewise as producing more value from the land than can possibly be derived from the hap-hazard sort of farming so extensively practised in Canada. The great difficulty seems to be in getting at a system agreeable to our soil, climate, and the demands of our market. It should certainly be the object of every farmer to raise a proportion of wheat, barley, peas, oats, potatoes, as well as stock, including horses, milk-cows, beef-cattle, sheep, hogs, and poultry. These are the principal commodities our market demands. The system recommended by "Vectis" is the four years' rotation as practised in England. It appears quite obvious to me that this rotation will not work profitably in Canada at present. On a farm of eighty acres there would be twenty acres of turnips; twenty acres of barley or spring wheat; twenty acres of fall wheat; twenty acres for pasture and hay; no oats, nor peas, without making subdivisions in the fields which would render the system irregular and incomplete. But waiving the subject of feeding off twenty acres of turnips with sheep, as in England, and adopting the plan of rotting them on the land—say pull and take home every other row for winter food—the system is still at fault. Twenty acres of grass will not maintain the horses, cattle, sheep, and hogs, through summer that are necessary to eat ten acres of turnips during winter; and if this system were generally adopted they could not be bought, for there is no waste land in this country where they can be raised and kept during winter without shelter as in England, consequently every farmer must depend upon his own resources for his sufficiency of stock. There is no doubt but the ploughing down of clover acts as a valuable fertilizer, and on some soils and under certain circumstances, the plan may be carried out as a principle. But we must have hay, and pasture, and if we must have clover to plough down we must have a proportion of each which cannot be under the four years' system. Again, the land only being in grass one year, and perhaps mowed the same season, would be but a small aid in restoring fertility to our already over-cropped fields.