

never appear to consider that the money of their own fellow subjects finds the way to the cities and towns every shilling of it, for indirectly, and this is by no means the then paid to foreigners. Without markets a sale of produce, how can agriculture be thus? particularly in a country like this nine-tenths of the population are employed in agriculture. The only remedy that is in the power of farmers is to "Shear their own and wear it," for it will be impossible for them to buy without the means to purchase. We wish to be considered disposed to make mistakes without any cause. If we are in error we would willingly be set right, and acknowledge our error. We cannot see how Canadian wheat is to prosper, if the few markets we are supplied, in a great measure, with foreign agricultural produce. We may be condemning and advocating so constantly this principle, but it is useless to expect an improving and prosperous agriculture under our present laws. As well, therefore, cease to recommend improved systems of cultivation and sowing to farmers, unless there is some prospect of their proving profitable to them.— cannot afford to expend labour on what yield remunerating returns.

meadows in the neighbourhood of Montreal good, but in general throughout the country it is said that they are short and poor.— price of hay in the Montreal market is very low, 22s. 6d. to 27s. 6d. the hundred bundles. could not prove that the country is not suited for raising and feeding cattle. Straw is cheap. The prices current will show the prices of produce. All tending to prove that we have the most ample means to feed ourselves without any foreign aid. The prices of meat is very low for this season of the year. There is abundance of labour to be hired, and the consequence of the very numerous emigration from the country. The Government will save many of our emigrants from suffering and misery, by finding necessary public works, that give them employment and retain them in the country. Now is the time that they want employment, immediately on their arrival, before they become discouraged, and go off to another country. We do not believe that the neighbours would give them so much encouragement as they will obtain here, but if they once get to the country, very few of them will ever come back here. There is ample means to give them employment, if the work goes on; and in a few years, these poor people may be cultivating their own farms, and working for British manufactures.

St. Paul, June 20th, 1842.

## W HINTS TO THE WHEAT GROWER.

There is no operation in agriculture to which a greater degree of importance should be attached than that of properly preparing land for the sowing of wheat; yet there is no subject upon which there is a greater amount of ignorance and when its importance and the numbers engaged in the business are taken into consideration. With most farmers it is sufficient to sow, by ploughing two or three times, (and in a very imperfect manner); the soil is comparatively mellow while they have no knowledge whatever of the changes which the

soil undergoes by contact with atmospheric agents, and that deep, clean, and frequent ploughing is of vital importance to give strength, vigour, and freedom of penetration to the coronal roots of the plant, which cannot make any impression through the *hard pans* caused by unskilful cultivation, unless thoroughly broken up and pulverized.

As wheat is the principal and almost the only staple crop the Canadian farmer can cultivate with profit, we deem it our duty and privilege as conductors of an Agricultural Journal, to disseminate all the useful information in our power on the subject, and give our own opinions and experience frankly, at the same time we earnestly solicit our Subscribers to make some experiments on this crop the ensuing fall, and when the proper time arrives report the results through the medium of THE CULTIVATOR.

To prove that we do not urge on others what we are unwilling to attempt ourselves, we take much pleasure in reporting a few experiments which we made in the fall of 1839.

The experiments in question, were made on land ploughed or broken up in the month of June, to the whole of which an equal amount of manure and seed was applied. The field on which they were made was divided into four equal portions, and each treated in the following manner:

No. 1.—The manure was spread over the ground previous to the first ploughing, and thoroughly incorporated into the soil, in the course of the following operations. The third and last ploughing was laid up into lands four yards wide, sown and harrowed in, and immediately properly water-furrowed.

No. 2.—The manure was drawn into the field in the month of March previous, and made into a large compost heap. The first, second, and third ploughings took place at the same period with No. 1, and after the third ploughing which was laid up into narrow lands as above, the ground was harrowed twice lengthwise, and manured from the heap as before mentioned. The fourth and last ploughing was performed in the same manner as it intended for drills for turnips, with this difference that instead of being twenty inches as is usual for turnips, the drills were only about fourteen inches asunder. The seed was then sown broadcast, and harrowed in singly lengthwise, with a pair of light harrows, and water-furrowed. The plants came up nearly as regular as if sown with a drilling machine.

No. 3.—Was managed in the same manner as No. 1, with this difference: The manure was taken from the compost heap above alluded to, and spread over the ground the day previous to the third and last ploughing. It was then marked out into lands four yards wide, the seed sown on the manure, and well ploughed in, and afterwards harrowed lightly and water-furrowed.

No. 4.—Was managed in every respect as No. 3, with only this difference, that it was left rough and not touched after being ploughed in, which is the usual mode of covering wheat with the plough.

The result of these experiments was as follows.—Parts of No. 1 were considerably winter-killed and slightly injured with the rust, and gave a return of about 25 bushels per acre of a middling sample.

No. 2 was not the least injured by being winter-killed or mowed, and the stem of the plant or straw stood up stiff and short like beanstalks, and gave a return of about 31 bushels per acre of a superior sample.

No. 3 gave a return very similar both to quality and quantity as No. 1.

No. 4 did not yield more than 16 bushels per acre, and that of an inferior sample.

We account for the great difference between the 2nd and the 4th Div., in the following manner:—In the former, the wheat being covered a sufficient depth with finely pulverized soil, came up in a much less period of time than the latter, and the plants being in rows sheltered the roots, and they naturally being interwoven together, were not so easily displaced by the thawings and freezings in the spring; but the greatest advantage belonging to the plan is less liability to mildew, and grows much shorter and stiffer in the straw, which is a clear proof, in our opinion, how important it is to those farmers who are engaged largely in the culture of wheat, of introducing drilling machines.

No. 4 which was left rough and gave so inferior a crop, would have yielded a much heavier return, had it been sown ten days earlier. At the best, it is a plan we have always been decidedly opposed to, for the simple reason that the surface must be more or less covered with receptacles for surface water, which has a tendency to destroy the plant. If any of our readers, who practice this system, are not satisfied as to the validity of our assertion, we advise them to examine their fields thus sown in the latter end of the month of November, or soon after the equinoctial rains, which most generally take place about that time; and if the space between the furrows are not filled with water, which must have a pernicious influence upon the health of the plant at that inclement season of the year, then of course we must charge the result to some other cause with which we are at present unacquainted.

In order to have carried our experiment No. 2, to a still greater perfection, we purposed to have made a small sized scuffler or horse hoe, and cleaned the ground of all noxious weeds, in the first week in May, or as soon as the land might be sufficiently dry, but the plan was not acted upon. It is one which we conceive to be practicable, and attended with very little cost. At some future period, we may try other experiments in the cultivation of wheat as well as other grains and roots, and give to our readers the profit and loss, and a detailed description of their management.

In the cultivation of wheat as well as other crops, no specific rule can be laid down, that would be applicable under every circumstance; the quality of the soil, the peculiar state in which the land may be found previous to commencing the operation, and the changes of the seasons, all contribute to influence the management; but upon one point we may safely centre, that the land should be in good health, and that it requires clean and frequent ploughing.

The quantity of cattle in various European countries has been estimated to be as follows:—

	CATTLE.
Great Britain.....	5,100,000
Russia.....	19,000,000
Netherlands.....	2,500,000
Denmark.....	1,607,000
Austria.....	9,915,000
France.....	6,681,800
Spain.....	2,500,000
Portugal.....	1,500,000
Italy.....	3,100,000