

The Failure of Grass Seeds.

In our experience of Canadian farming we can hardly remember any previous season in which the drought has been so disastrous to the young clover plant as the present. In Ontario, this season, the rule has been that the grass seeds have failed to catch. We do not say but that this failure has been in too many cases helped by improper cultivation. We believe that upon land rich and clean grass seeds are as little liable to miss as the grain crop itself. But this year the drought has been very disastrous, and we have heard of farmers who have only succeeded with about 10 per cent. of their grass seeds. We propose to review a few plans by which we may, where grass has failed, catch up to the rotation.

Fall wheat and barley are the usual crops to which we in Canada seed down. If the clover has failed to show sufficiently upon fall wheat stubble, we may be sure that there is no chance for hay next year. Upon spring grain, with favourable showery weather this fall, the clover might yet take sufficient hold upon the field ere winter set in.

There are two courses open the for renewal of the clover :

1st. As soon as the first September rains fall, harrow the stubbles thoroughly, tearing up the surface to the depth of two or three inches; sow grass seed liberally, and cover well with the iron harrow, following with a bush harrow. If it be possible to procure old short manure, spread evenly upon the surface. This is somewhat of a risky performance, and its success will be greatly dependent upon the nature of our coming winter. Where, however, there are large bare patches in a field which has otherwise taken well, we would not hesitate in adopting this plan.

2nd. Where a whole field has missed, and where our land being clean, we do not think it advisable to crop again, and are anxious to bring the field into hay, we would advise to plough the field lightly, completely reversing the furrow slice, harrow smoothly, spread upon the surface well rotted old barn-yard manure, incorporating the latter in the soil with the harrow; sow *liberally*, and brush harrow and roll the whele.

If, however, the land be in sufficiently good order to promise a paying grain crop, seedling down to rye, fall wheat, or spring grain, is the most certain method of obtaining a good catch.

It must, however, be borne in mind that we are about to take one more exhaustive crop from our soil than we had calculated, and we should make amends to the land by liberal application of such manure, barn-yard or artificial, as we have at our disposal.

Let us as farmers remember that the hay crop has been short this year. Owing to the fact that there is now much old hay in the country, the probabilities are that hay will not

command as high a price in the market during the winter of 1871-72 as the majority of our farmers seem to expect; but that, as the *area* of new meadow will undoubtedly be small next summer, we may expect an extra market for hay in the winter of 1872-73.

Silver Beet.

In reply to "Sarawak's" enquiries as to the "Silver or Sea Kalo Beet," we repeat the statement already made, that this is evidently one of the hardiest plants that are applicable for the ploughing under as green crops. The course adopted last season with the silver beets grown by the writer was, as soon as the frost becomes severe, the roots, leaves, and all were covered with earth to the depth of some inches, and they so remained all winter. At the very earliest spring they were examined, and found to have sprouted from the heart, while the old last year's leaves had decayed. The new leaves had evidently been growing for some little time, for they were quite blanched, and two or three inches long. As soon as the heavy frosts were gone the whole of the plants were uncovered, and the blanched and growing leaves exposed to the weather. They never failed at all, nor were affected by frost, although we had some very severe ones. As soon as it was possible for anything to grow, and before anything else *did* grow, this hardy plant put forth its leaves, and finally its seed stalks, and was never influenced by the weather in any way; and although during the drought in the summer the ground was as dry as powder, yet still the seed stalks continued to grow, and are covered with seed. The stalks average nearly four feet six inches in height, or rather length, for they do not all stand upright; they have never flagged or checked in their growth, and the amount per acre of the seed stalks would be something enormous, far more than that of the leaves last season.

There can be no reason, therefore, why the seed should not be sown at the earliest possible time that it can be got into the ground. Like all beet seed, the true seeds are covered with a rough, hard, horny case, that requires considerable time in the earth to soften it sufficiently for the seed germs to burst it and come forth.

As to the proposed feeding or cutting of the greens, the writer considers it would be the very poorest economy to do so; the plant attains its full growth in three months from the time it comes into double leaf, and it should then be ploughed down in the most ruthless manner, and the ground thus given the full benefit of leaves, roots and all. By doing so early enough, it is believed a thorough manuring for fall wheat would be secured, although it might be better to wait for a spring crop. But in land that will admit of fall wheat being sown as late as October, there is no doubt the silver beet would form an admirable dressing when so treated.

We have had no experience in a second crop of leaves, the first being cut off; although we should say that so hardy a plant, and such a vigorous grower, would throw up a large amount of a second growth of leaves; but if this practice is pursued, the heart or crown must on no account be cut, or destruction of the root, without a second crop of leaves, must follow. The cutting of the leaves in the manner proposed can only be excused from necessity.

History of a Canadian Farm.

WATER PIPES TO SUPPLY THE BARN-YARD AND DAIRY.

Early in my farm experience there came some very dry weather, and the well at the house was not sufficient for our demand. I had a visit from an intelligent emigrant Yankee, who had been engaged in laying water pipes in the United States. He wanted to board with me for some time, and we finally agreed to offset his board by his bringing into my yard the water from a large and beautiful spring that took its rise somewhat over a quarter of a mile from our house. At that time I knew nothing of boring logs for conveying water from a distance. Now, however, I am well posted in the work, and should think almost as little of bringing in a spring as of digging a well. My wife had always had a splendid spring of water in her dairy at home in Scotland, and often said that one-third of the profit of cows and their produce depended on having it. I have lived to be convinced of this fact—that without cold spring water the dairy is not cold or sweet, and unless it is both cold and sweet no good butter can be continuously made. You may make it good anywhere almost when the seasons are propitious, pasture in the best state, and weather cool; but your cows give milk in all sorts of weather, and your dairies must be so good as to neutralize all changes of external temperature. At home, in Scotland, on rented farms, we find the difficulties great enough; but then the farms are not our own, and the landlord will not make any improvements of this kind as we find them requisite. In Canada the case is quite different. When on our own farms, all we do is done for our own benefit, and we go at it with a good heart. So it was with our dairy. We must have the cold water or make indifferent butter sometimes. Here was an opportunity of getting the work done on reasonable terms of payment.

All the tools wanted our American emigrant could make, except the auger, which he had. I went to a neighbouring tamarac marsh, and cut a quantity of small straight logs, all 14 feet long, and hauled them home and posted them up in a convenient place to work at them. Our emigrant provided himself with a first-rate American 2½ inch screw auger, and the blacksmith in the neighbour-