The Question of the Day.

To the Editor FARMER'S ADVOCATE:

Grass-growing is indeed becoming the question of the day, as no one of experience can but perceive the importance of some change of cultivation to keep up the fertility of our soil. I have cropped some of my land since the spring of 1881, with the exception of fallowing after every third crop, or seeding down to timothy with the first crop of wheat. I have hitherto had fairly good catches, especially with my first experiences, but the past few seasons have been, to some extent, failures, owing principally to the lack of moisture, and, perhaps, in some measure to the fertility of the soil. However, I have generally taken off two crops of hay, from one to two loads per acre, and immediately after the hay is off, plowed shallow and rolled down, and as soon as the sod rotted, plowed deeper; just the same treatment with the natural prairie, except I have plowed the timothy stubble deeper; have not taken more than two crops of wheat, when we again summer-fallow. This treatment has been the means of supplying root fiber, and has prevented drifting to a great extent, but I do not think it has increased the fertility of the soil, as I have not grown any heavier growth of straw or extra yield per acre, but the quality of the grain has improved and the straw stands stiffer. It is evident we must adopt different methods. It appears we have not yet any leguminous plant, like the clover, vetches or peas, just suited to our conditions. The latter, possibly, we can produce, but from my experience not profitably. I do not care to grow peas, owing to the encouragement of growth of weeds, and another objection is the harvesting, as the winds blow the peas from one part of the farm to the other, like the tumble weed, distributing many weed seeds. I have experimented in a small way with Brome and native rye grass. I prefer the Brome, both for hay and pasture, the latter, especially, although I have seen one of my cows tethered in a good growth of it in the spring and she would not eat it, but when taken from the Brome and tied on the roadside, she would eat greedily. Mr. Bedford thinks it was owing to the Brome grass being too succulent. It makes fine hay, but needs cutting before the seed ripens, otherwise the seed scatters everywhere when touched. I have been afraid it may become too troublesome to destroy, as the roots run like the couch grass, only more aggressively, but from experience in a small way I think they are easily killed in our dry seasons by the same treatment as I have given my timothy. I cut with a binder for seed, and shock up like grain. The threshing has been a difficulty, as ordinary threshers do not understand it. The sheaf should be held in the separator head first, and withdrawn again and not allowed to go through. If properly done, it does not require much more cleaning, but I must confess I have not had it done with success. For hay, I cut with a mower. Owing to the strong growth of roots, I think it will prove more beneficial to the soil than either timothy or native rye. The latter is a great producer. Horses eat it with avidity and thrive well, but I think it will prove very exhausting to the soil and not so beneficial in root fiber. I have not had so much experience with it as Brome or timothy. I should have stated my mode of sowing Brome has been by hand; this is too tedious. I have seen a seeder at the Experimental Farm driven like a wheelbarrow. Mr. Bedford informs me it works well. I see them advertised. Some years back I tried Hungarian grass and millet. I grew good crops, but failed to save the seed, owing to the short season; the frost generally comes too early for it to ripen. I would warn all desirous of growing it to beware of the mustard which I always found in the seed; most of us, knowing what that is, are cautious of introducing it, and another objection I have is, it is too exhaustive on the soil.

Now, the crucial point is, what course are we to adopt to make our vast stretch of prairie land return to us the means of subsistence without impoverishing the soil, and not allowing it to become like so many of those exhausted States in the neighboring Republic? This must be the inevitable result, unless we adopt other methods. Although I have not adopted it myself, I will suggest what is to me, and I know to many others, a solution. Where we have grown 200 acres of wheat, we should grow only 100; where we have had three crops between summer-fallowing, we should have only two at the most; indeed, I have thought it would be a good plan to have only one crop, and so prepare all our land for cropping in the next spring. Of course, we should have more summer-fallowing, and too many of us now have more than we do properly. I would also recommend the growing of more roots. We can do this much easier than in Ontario, and more certain of a crop, but I am not prepared to state how they can be kept for winter use. This is an essential point, and another is to house the stock to feed them to, providing the cattle are raised or bought in to fatten. Barley and oats should be chopped and fed with cut straw to cattle, and none of it burned, except what may be wanted for fuel for the threshing.

I know, Mr. Editor, these practices cannot be carried out at once, but the principles enunciated can be copied to some extent by a great many. Our first question is a sufficient return to keep the sheriff away, so that a change cannot be made hastily, but let us keep in mind the necessity of keeping up the fertility of our fields, and work gradually for that end.

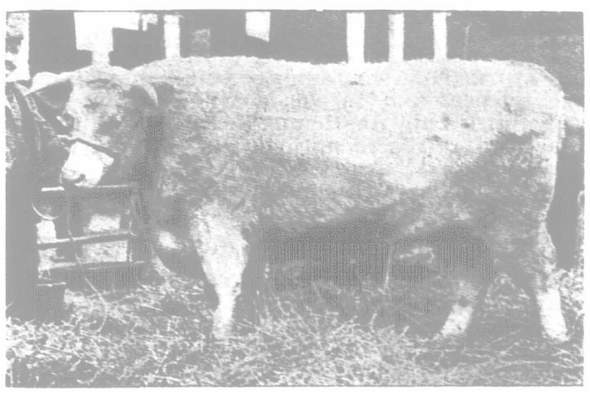
These few remarks, if worthy the space in your valuable paper, may possibly assist in your efforts to impress upon people the necessity of keeping up the fertility of our farms. W. WENMAN.

Glenwood Municipality.

Must Grow Grass.

To the Editor FARMER'S ADVOCATE:

The questions you propound involve some problems which I, like a good many more, am still trying to solve, and which I by no means claim to be an authority on. I feel sure, however, that the successful farmer in the near future, in the older settlements, will be the one who to-day recognizes the changed conditions, and adapts his methods to meet the necessities of the case. I had an object lesson on the matter in question, which I wish could be brought home to every farmer in Manitoba. Two years ago I was plowing some stubble for oats, one end of which had been in cultivation for 17 years, the other had only borne one crop. The soil in both parts was as near alike as possible; the spring was a dry one ('98), and following two very dry seasons with us. The old land turned up in hard lumps, and no amount of harrowing seemed to make a good seed-bed; the new land, on the contrary, turned up mellow and moist, and a couple of strokes of the harrow made an excellent seed-bed. The lesson, I think, is obvious. I do not think that the unsatisfactory yields we are getting from old land result so much from the soil being depleted of plant food as from the mechanical condition it has got into from lack of humus, or, to put it plainly, the complete absence now of the original sod; it was this which gave the soil the power to absorb and retain moisture, and in this way to withstand drought. We never knew what drifting soil was till this sod was gone. The land is also washing badly now in heavy rains, for the same reason; in fact, on some of our lighter soils, where the land is rolling, the higher land has been almost completely stripped of the surface mold. Where land has got into this condition, the sooner a sod is got onto it again the better, by seeding down to Brome or some other grass. Another strong argument in favor of this, and which I am afraid is not sufficiently realized yet, is that we are threatened now with some of the grain insect pests of older lands. Last season the Hessian fly did considerable damage round here. Now, as insects like this feed entirely on the grain crops, it stands to reason that a break in the continuous wheat cropping is the most effective check we can give them. To get any revenue from land seeded down in this way involves the keeping of stock to utilize the product. I sometimes think that in urging the farmers in the Province to go more into stock, too much stress is laid on the manure point. Cattle well handled should show a profit apart from this, and the turning of unmarketable Brome grass into marketable beef or butter would be a more potent argument in favor of keeping stock than manure making. Just where manure should be applied is still with me an open question. Am inclined to take Prof. Robertson's view of the matter, that it should not be applied directly to grain crops; the resulting crop, as a rule, generally shows more of the increase in the straw than in the grain. A more serious objection still is that it often produces a rank growth of weeds. I have also tried hauling direct from the stables to the land intended for fallowing. My experience in this was also unfortunate. The season it was applied was a very dry one ('97), and although the fallow was well harrowed, the weeds failed to germinate, and came up in the crop the following year, nearly ruining it, although the rest of the field not manured was comparatively clean for the season, which was a record one for weeds ('98). Am inclined to think the best place to apply manure would be on the second year's grass, harrowing it well in in the spring. This, of course, is only conjecture on my part As to the class of stock to be kept, this would depend on how the farmer was situated; where he had to depend entirely on hired help beef cattle would probably be the most profitable, as they could be turned out in spring as soon as seeding started, and would not be much more trouble till after threshing. Where there was a family able and willing to take hold of dairy stock a quicker and better return would probably be obtained.



SHORTHORN STEER, KELEMANJARO.
Winner of first prize and breed cup at Smithfield, 1899.
PROPERTY OF MR. JAS. BRUCE, INVERQUHOMERY, ABERDEENSHIRE.

As to fencing, have not given the matter much thought, but think every farm should be fenced around. Where this was done, and a permanent pasture sufficient to carry the stock till after threshing was available, nothing more would be needed, as the cattle would stick pretty close to the Brome sod till winter set in, and in the early spring before the native grasses came. Where Brome was intended to be used as pasture as well as hay, a permanent rotation would have to be adopted and the farm fenced accordingly, or a movable fence resorted to. Have not seen any portable fence yet which in my estimation can equal barbed wire, with light posts, for ease in moving. JAMES FLEMING.

Morton Municipality.

Why So Little Cheese is Eaten in Canada.

There has been a great deal written lately on the above subject, trying to find a cause and a remedy for it. Some writers blame the cheesemaker; others the storekeeper; others say the people will have to be educated in a taste for cheese before there is much improvement. Each of these reasons have something to do with it, but the chief reason that there is not more cheese eaten is that cheese is too high in price in comparison with butter and meat—the two articles that largely take the place of it. Butter and meat are here only about half the price that they are in England; while cheese is higher here than it is there. Canadian cheese is retailed lower in England than it is in Manitoba. Now, it takes three times as much milk to make a pound of butter as it takes for a pound of cheese, yet cheese is often the highest per pound, and cheese at fifteen to twenty-five cents a pound is prohibitory to the average farmer or workman. There are thousands of Old Country people in Canada that do not need to be educated to eat cheese. They have been used to it, and would eat it yet if they could get it at a reasonable price. The storekeepers can do a great deal to help make cheese more popular; first, by having a little good cheese for their customers. A storekeeper usually only cuts one cheese at a time; it may be cured, or it may not, but it is that or nothing. And then in the matter of cutting cheese the storekeeper needs a little training. He generally cuts a piece off right from top to bottom, which is nearly all surface and is all dried up before it can be used. A good plan would be to have directions on each box, telling the best way to keep cheese and the way to cut it so as to have the least waste and have the cuts in the best shape for the consumers. If there was as much pains taken to put cheese on the home market as there is to put it on the Old Country market, and cut the profit of handling it a little finer, there would soon be a big difference in the amount of cheese eaten. SIDNEY BROWN.

Argyle Municipality, Man.

The Importance of Breed Type.

BY G. W. CLEMONS.

In these days of official tests it seems to me very important that we should not lose sight of breed type. These tests are doing a great work and no one can successfully decry them, but there is a possibility that breeders in purchasing stock will look too much to the question of relationship to a high-record cow, and too little to individual merit and breed type. Suppose a bull traces a dozen times to Princess Royal 30th, or some other great cow, is it to the interest of the breed to put him at the head of a good herd in spite of the fact that he is a small, delicate creature, with minarets on his top line like a Jersey, or perhaps a big, coarse, rough brute with a skin like a board and hair like wire?

All the excellence of the breed is not confined to one or two families by any means. Dozens of good cows are coming to the front in every State and province, and surely we can find good typical bulls from some of these cows, so that we need not head our herds with culls simply on account of their fashionable pedigree. Our cows must be producers first of all, but if the breed is to be permanently popular, we must have a pride in the appearance of our animals as well. They must be of uniform type and handsome conformation. The elaborate comparison of Advanced Registry records made by Mr. G. W. Knorr shows that the cows of the milk-and-beef form are superior to the cows of milk form both in production of butter and in percentage of butter-fat. It will, I think, be conceded that the majority of Holsteins are of the milk-and-beef form, and I submit that it is advisable to adhere to that form in preference to any other. The extreme milk form shows weakness of constitution which is fatal to long-continued heavy production. It takes a cow of sturdy stamp to stand heavy feeding and large production for the ten or twelve years of her milking life. Give us the good-sized, low-set, broad-chested, big-bellied cows, moderately fine at shoulder tops with no pinch behind them, level rumps, and big, square, level udders. The unsightly sloping rumps and unshapely udders demand attention. Let us take a lesson from the Ayrshire breeders on these points. And again, let us avoid the 900-pound cows. Leave the light-weight class to the Jerseys and the goats.—*Holstein-Friesian Register.*