

## Fertilizers.

Among thinking, intelligent farmers of the present day perhaps there is no subject that is being more widely discussed than "How to Best Keep up the Fertility of the Farm." That the old, reckless method of cropping the land heavily with grain, and then selling it all, or almost all, off, and keeping little or no stock, has almost entirely disappeared, no one will deny; yet, still, even the men who have for years fed the greater part of their grain and hay on their farms, and who have adopted new and improved implements with which the more perfectly to carry out their tillage operations, feel that the ground is slipping from under their feet, that their crops are, as a general thing, becoming beautifully less, and that unless they take some further steps towards increasing, or at any rate maintaining, the fertility of the soil, they will in a few years find themselves in a sorry plight.

The question before these men, then, is, In what way can we best preserve and add to the fertility of our lands?—a question that may be answered in several ways. For example, more coarse grains, mill feed and oil cake may be bought and fed on the farm, and so the output of stable manure increased; or green crops, such as clover, buckwheat, rye, turnips sown broadcast, etc., may be grown and plowed under; or, lastly, artificial fertilizers may be purchased and used on the farm.

Now, in our opinion, each of these three methods has its advantages and disadvantages. In the first case, many farmers have not accommodation for feeding nearly enough stock to supply them with the manure needed by their farms.

In the second case, green manuring, with the exception of clover, can only be carried out to a very limited extent, as it entails a good deal of labor at what are very often very busy seasons; and, again, it really only supplies one constituent to the soil to any great extent, viz., nitrogen. And in the third case, the commonest objection is that it costs too much, with, however, very frequently the remark added that "they (artificial fertilizers) are no good anyway, they are only made up of sand and dirt." It is to this latter method that we propose to draw our readers' attention, and while we are well aware that, metaphorically, it is shaking a red rag at a bull to suggest artificial fertilizers to most farmers, still a few notes on the subject of commercial fertilizers, and our experience with them this last season, may interest some of your readers. And let me say here that I have often wondered why it is that Canadian farmers, as a general thing, have such a rooted antipathy to fertilizers. It is well-known that the English farmer simply could not get along without them, while in Scotland, the birthplace of *scientific* farming (mark the word), and the home of the most successful agriculturists the world has ever seen, very often the sum spent in artificial manures is very much in excess of the amount paid in rent and taxes, for the canny Scot knows well that "if you do not feed the land, the land will not feed you;" and so he spends his hundreds of pounds on nitrate of soda, sulphate of ammonia, superphosphates, bone and basic slag, while his cousin in Canada trades his ashes from the stoves off for a few bars of soap, and would hold up his hands in horror at the thought of spending \$100 for fertilizers for his 200-acre farm. And probably some of my readers will fling down their papers with the remark that I am another crank, when I say that I firmly believe the day is not far distant when artificial fertilizers will be used almost as freely in Canada as they are in England; nevertheless I do believe it, although a very few years ago I did not. I have watched closely for the last decade the trend of events in Canadian agriculture, I have heard men declare that while manure was a good thing it would never pay to buy it, and I have since seen those very men buying manure by the carload from the Street Railway stables in Toronto, shipping it out by train twenty miles, and then drawing it two miles to their farms. I have heard a large dairy farmer declare, with regard to silos, that he would give up his cows before he would go to canning feed for them, and I have since heard that man declare that the silo was indispensable to every dairymen. And I reiterate now my firm conviction that in a few years the Canadian farmer will no more dream of putting in his turnips without sowing from four to six hundred pounds of superphosphate to the acre with them than his Scotch or English confrere would to-day, and my experience this past season with bone phosphate, manufactured here in Canada, convinces me that the sooner the change I predict takes place the better for Canadian turnips.

J. Y. O.

## A Canadian Packing House.

BY MR. JOHN HALLAM, TORONTO, ONTARIO.

Owing to the constantly declining prices of wheat and barley, the attention of Canadian farmers is being rapidly directed to dairy and cattle products. The wonderful success and extent of the cheese production is inducing the Dominion and Provincial Governments to use praiseworthy efforts to accomplish similar gratifying results with butter, in which direction much improvement has already been made, both as to quantity and quality. The great extension of these two industries has created a similar increase in the number of cattle and hogs fed. The increase is largely in excess of the requirements of the population.

The profitability of the dairy and cattle industry must largely depend upon the prices obtained for the cattle and hogs which are raised in conjunction with it. The home market will soon prove utterly inadequate for the consumption of animal products. Even under the exceptionally favorable conditions which Canadian cattle and sheep were formerly admitted into Great Britain, the disposal of live stock there was attended with so much risk and expense that it was thought that some cheaper means of transportation must be found. The withdrawal by the British Government of the preferential terms of admission for Canadian cattle on foot has emphasized the necessity for such a change.

Many believe that a great improvement in the price of cattle and their products would be effected by free trade with the United States. Such expectations have no foundation in fact, as is evident from the following statement taken from the Official Report of the Bureau of Statistics at Washington, for the year ending June 30th, 1892:—

The total value of animals and their products exported from the United States to foreign countries was.....	\$183,875,439
Of which there was exported to Great Britain.....	121,507,081
The Dominion Trade and Navigation reports show, for the year 1892:—	
Imports into Canada from the United States and entered for home consumption and duty free.....	\$5,225,400
Animals and their products dutiable.....	1,268,316
Total.....	\$6,493,806
Exports from Canada to the United States, animals and their products.....	\$3,935,921

From this it will be seen that Canada purchased from the United States a much larger value of these products than it sold to that country. The trade in animal products between the two countries could be very largely increased, if it was not for the excessive duty paid on live animals and their products: Canadian lambs under one year old, 75c. per head; sheep and lambs over one year old, \$1.50 each; cattle less than one year old, \$2 each; cattle over one year old, \$10 each.

The success which has attended the beef and pork packing business in Chicago and other places is almost incredible. In 1892 the United States sold to foreign countries, besides supplying their own market, of hog products for human food—bacon, hams, lard and pork, 1,225,538,352 pounds, valued at \$85,116,566, averaging a little over 7c. per pound. They also sold beef products—fresh, canned, cured and preserved, including rendered tallow, 468,522,760 pounds, valued at \$31,436,169, averaging a little less than 7c. per pound.

The demand for animal products seems to be unlimited. Canada should have a share of this growing and prosperous trade. She is exceptionally well situated for growing cattle, hogs and sheep.

To develop this trade, and centre it in Toronto and Winnipeg, will require men of ample means, with enterprise and brains, so that the farmer can feed more hogs, and give a constant supply to the packing houses.

The farmer should raise cattle and fatten them to meet the requirements of the home and foreign markets. To make this business successful in Canada, the packing houses must have a constant and increasing supply of hogs.

The statistics of live stock in Canada are very scanty and unreliable. The latest statistical information concerning live stock in the Province of Ontario is as follows:—

Cattle.....	2,025,000
Sheep.....	1,927,000
Hogs.....	1,070,000

Number of animals slaughtered for home consumption and sold to foreign countries in the Province of Ontario:—

Cattle.....	450,000
Sheep.....	620,000
Hogs.....	975,000

It is of the utmost importance that farmers should see the necessity of increasing their live stock. It would be much more profitable than growing wheat and barley at the very low prices now prevailing. Besides, it would give the land a much needed rest from the exhausting process of constantly growing wheat and barley. The manure would enrich the land and make it more productive. By this means the farmer would be enabled to grow a rotation of crops, and not depend upon any one crop for his living.

It is quite clear from the foregoing that for the surplus of animals and their products, Canada must look to Europe, and especially to Great

Britain, for its market. For this country the great objects to accomplish are, the cheapest possible methods of preserving and curing for home and foreign markets, and the quickest and most economical means of transporting to the markets of the world. These are the ends which capitalists and railway companies should try to accomplish for the Dominion of Canada, for, as sure as the sun shines at noonday, there is in this country an extensive, progressive and profitable field waiting the energy and enterprise of those who have the pluck to enter and take possession of the promised land. The establishment of packing houses in Toronto and the Northwest, with ample capital, employment of the best skill and latest improvements, is a step in the right direction that will not only conduce to the advantage of farmers, but to the general prosperity of the country.

## QUESTIONS AND ANSWERS.

## Legal.

## TRESPASS.

MR. C., Muskoka:—"In the year 1888 I sold to A the hemlock bark growing on my farm, and the agreement expressly provided that A should have five years to take it off. The five years are now expired, and only a part of the bark has been taken away. Has A the right to take it away now or at any future time?"

Under this agreement we think A can not now, after the expiration of the five years, take the bark, and we think he would be a trespasser if he entered on your farm to do so.

SUBSCRIBER, Guelph, Ont.:—"How many holidays is a man entitled to when hired by the year, and are Sundays holidays?"

The holidays include Sundays, New Year's Day, Good Friday, Easter Monday, Dominion Day, Christmas Day, and the days appointed for celebration of the birthday of the reigning Sovereign and Thanksgiving Day. Whether a servant is entitled to all or any of these days as holidays depends entirely on the nature of the hiring, and of the work required to be done; generally a man on a farm is bound to perform on holidays, including Sundays, the usual work of necessity which should be performed on those days.

LOCHEIL FARMER:—"Twelve years ago B and C gave to A a promissory note payable twelve months after date. The debt for which the note was given was owing from B to A, and C signed the note as a surety for B. The note was not paid at maturity by B, but the interest was paid, and A gave B further time to pay it, and the time for paying has been extended from time to time till now. C has not been before called upon to pay the note, and he has not been consulted about extending the time for payment, and he has himself never paid anything on account of the note either for principal or interest; in fact, C thought the note had been settled for years ago. C is now being sued. 1. Is C legally liable? 2. What should C do?"

1. C is not liable. A had no right to extend the time for payment without getting C to assent to it, and besides as against C more than six years have elapsed since the note became due, and he not having acknowledged the debt or paid anything on account of it, the action against C is barred by statute. 2. C should consult a lawyer and enter a defence at once, or a judgment will be entered against him.

SUBSCRIBER:—"I purchased at an auction a cow which I have since discovered was some months before found by a veterinary to have tuberculosis, and the owner knew that the cow was diseased. Can I recover damages from the person who sold the cow to me, and to what amount? Can I make him take the cow away from my place? Can I recover damages from him if the disease breaks out in my herd?"

Although you may appear to suffer a hardship, we are of the opinion that you can neither recover any damages nor compel the seller to take the cow away; and if you feared the spread of the disease among your herd, the diseased animal should have been at once removed. The law is that unless there be some fraudulent misrepresentation or warranty given at the time of the sale, then the purchaser must be taken to rely on his own judgment; and if he does so rely on his own judgment, he must take all risks.

You have not said that there was a warranty given or that any misrepresentations were made to you by the seller, and we have assumed there was none.

## PURE-BRED STOCK.

C & D:—"I purchased from A, by letter, a sow pig, and paid the money for it. A represented by advertisement that his stock was registered, and by letter to me agreed to furnish me with the registered pedigree and the certificate of registration. I received the pig, but have not received the pedigree or certificate, and although I have written to A several times, I can get no answer or satisfaction. Kindly let me know whether I have a legal remedy, and how to proceed?"

You have a legal remedy against A, by action for damages, and the damages recoverable are all the loss which you have sustained by reason of A not having delivered the pedigree and certificate at the time he should have done so.