

Editorial.

Making a Farm Self-Supporting.

The great secret of all successful farming is to make the land produce sufficient for the outlay of capital and labor, and have a balance on hand each year. This is business and farming for profit. Each year of plenty there should be stored up a surplus to meet the demands of a bad year, or where there is a shortage in the crop. There are more farms in this country that are not self-supporting than people are aware of, and gradually every year some part of the farm is being sacrificed when a pinch comes in the way of poor crops. There is no reason why every acre of land should not be self-supporting in every sense of the word, both in regard to manure, capital and profit. That a number of our farms are not self-supporting is owing to the fact that there is nothing in the land to support labor and production. The majority of our farms are not self-sustaining simply because there is not sufficient grain growing substances in the soil to produce a good or paying crop. You can't get *something* out of *nothing*, as a Grecian philosopher put it, and so with soil—it will just make the return to the cultivator what is in it in the shape of plant food—no more. To make farms self-sustaining or profitable, requires a thorough investigation on the question of capital and labor, and next the application of more intelligence and special knowledge in regard to farming as a business. To our own knowledge a great number of farms have not been self-supporting of late, and we consider farmers have lost money; or, in other words, the soil has not been producing sufficient to pay interest for the capital in the business, and pay for labor; and hence the farm could not be said to be self-sustaining. When a farmer finds that his land is not paying interest on capital invested he should take a candid view of the situation, and ask himself the cause, and by thus doing he will arrive at the solution of why farming does not pay or is not self-supporting. The primal cause he will find is poor land and badly cultivated soil. There is no use, gentlemen, going through the mechanical operation of plowing, harrowing and sowing seed on land that has not got the proper elements of plant food to raise a crop. It is very little use of a man buying costly and numerous machines, as he must at the present time, to farm but poor land. The same machinery is only required to raise 50 bushels on poor, undrained and badly kept land. Poor farms improperly cultivated and managed won't pay for the implements and labor, and hence cannot be self-supporting. It is a great fallacy to think any man can farm and that any man can make money out of a farm. The greatest diligence is required at the present time to prosecute farming with any degree of success, unless more intelligence and business is thrown into it. There is no doubt that for the last five years our farmers have been raising wheat extensively, and met with average success, and they thought that this would continue always, but a bad crop, as last year, is found to prostrate them, and we hear the cry that farming does not pay, and that the land is not self-supporting. The remedy

for all these evils is a mixed husbandry, and a wider conception of what constitutes paying farming. Like every other calling the profits are increased according to the business tact and intelligence of the operator. But there is more steady money in farming than any other business. The returns may be slow, but they are sure and certain, and not only should they be self-supporting, but by proper management, a good margin of profit can be had.

Leakages on the Farm.

The strictest economy must be practised to make farming pay. Those who think that it is easy to make money and farm and have a general good time, are mistaken. There wants to be the strictest economy in the most minute detail. There is hardly any business in which so many leakages can occur as on the farm. And we have no doubt that the want of success of a number of our farms is owing to inattention to small matters. There is no greater source of leakage on a farm than the careless way in which machinery and implements are kept. According to the improvements in modern machinery, &c., the outfit for a hundred acres of land cost in the vicinity of \$1,100 at the least, and this for a capital of a hundred acres of land. When this machinery is allowed to lay out doors in fence corners and exposed to all kinds of weather, there is no doubt that taking a given amount of capital, farmers are losing greatly on the mere score of implements and the care of such. Economy in the preservation of the material that is used in production, at the present rate, is a great point in preventing leakages. As a general thing, say an ordinary reaper only lasts, on an average, four years, this, by economy and care, would last three times this period. Plows, harrows, wagons and other implements might come under the same category with regard to economy. With a farm of one hundred acres, we venture to say that no man at the present price of labor and the cost of machinery and implements can make any headway, unless he stays the leakages in the saving of machinery. Taking a maximum yield of grain, and there is not a fortune in farming unless a man is careful and attends to the small things—the leakages. It is all folly to suppose that farming can be conducted only on pure business principles, and that with regard to economy and attending to leakages. But one of the most potent leakages of all on our farms is not active but passive, and that is the presence of so many noxious weeds. Of all the drains on the productiveness of a farm weeds are the most potent. It might appear strange, and almost incredible, if we state that of all the vegetable productions raised in this country in a given area, fifty per cent. of the production of this country is weeds—useless. What do farmers think of this? Is not this a leakage? No reference need be made to the personal habits of a farmer for wastes on a farm; the general economy practised on a farm is sufficient to teach a lesson on leakages. If a farmer keeps a poor lot of stock to eat up his grain and fodder, an adequate return is not made for the consumption; here is leakage. Good stock is a great point, and there is no more expense to keep a good animal than a poor one. Feeding a lot of scrub cows, steers,

sheep, horses, fowls, etc., that will only bring one-half the price of well-bred animals, is a common source of shortage; and there is no wonder a number of farmers get poor, when their class of stock is looked at.

Another fruitful source of leakage, and with a better class of farmers, is the misapplication of capital to the best advantage. Instead of laying out their surplus money to improve their land by drainage, and the purchase of a better class of stock, &c., &c., they put it into a savings bank, and probably only realize 6 or 7 per cent., when by using the same capital on the farm 50 per cent. might be obtained. A farmer should never allow his money to only draw bank interest when there are so many opportunities of investment on the land. The leakages we have mentioned are enough to dry up farmers' profits.

On the Wing.

On the 21st February we called at the Model Farm at Guelph, and when passing through the stable where experiments in feeding are carried on, we found these being prosecuted with unusual vigor. On the experiments in cereals, steamed food and ensilage, comprising nearly fifty steers, a just criticism could not be attempted until their completion. Those with respect to the comparative merits of the three great beefing breeds of the world are, however, always open to review.

Nine steers have been selected whose dams are Shorthorn grades, the sire of each class of three being Shorthorn, Polled Angus and Hereford thoroughbreds; and all the other conditions were as near alike as could be devised. They were summered on the soiling system—green corn and clover—with small quantities of grain; not highly fed, but in a manner easily accessible to the average farmer. They are weighed monthly, and their progress accurately compared, the following table showing the present results:—

ABERDEEN POLL GRADES.		
Average weight.....	1331 lbs.	
“ age.....	587 days.	
Gain per day (since birth).....	2.25 lbs.	
HEREFORD GRADES.		
Average weight.....	1218 lbs.	
“ age.....	575 days.	
Gain per day (since birth).....	2.12 lbs.	
SHORTHORN GRADES.		
Average weight.....	1406 lbs.	
“ age.....	724 days.	
Gain per day (since birth).....	1.94 lbs.	

In instituting comparisons between these and other experiments it must be borne in mind that the animals have not been fed for the show ring. At the Chicago Fat Stock Show, 1882, a number of steers, having an average age of 720 days, weighed 1,475 lbs.; and another batch, age 574 days, weighed 1,410 lbs. respectively, an average gain of 2.05 and 2.45 lbs. per day since birth.

A NEW DEPARTURE IN SHEEP EXPERIMENTS.

The experiments in sheep hitherto conducted are comprised under the following heads:—

1. The effects of different foods in the production of wool and mutton.
2. The weights attained by the various grades in a given time.
3. The weights and values of the fleeces of the grades, thoroughbreds and natives.
4. Microscopic observations of the texture and imbrications of these wools.