

are, the economy is false, for when spring sets in he will not be enabled to show his stock in that first-class condition which will most assuredly command very high figures.

But whilst I deprecate this system of the simple substitution of straw for hay, I believe there is still a way in which, until the pastures are fairly started, a true economy of hay can be accomplished.

The same results that have led to the above equivalent proportions as food between hay and straw, have also shown that 60 lbs. of barley is equal to 100 lbs. of hay. Now, 60 lbs. of barley is worth 75 cents, while 100 lbs. of hay is worth 100 cents. If then we substitute grain, such as barley, for a portion of our hay, we are saving 25 cents per cwt., or five dollars per ton of hay in our food, whilst we provide a sustenance peculiarly agreeable to the taste of the animal, and containing far more heat-producing qualities, and making a richer and better manure.

Let our readers "figure up," if not upon paper, by the light of actual experience and experiment and they will assuredly find that barley at 60 cents, or even peas at 80 cents per bushel, is the most economical food, when taken in conjunction with good hay or straw, and if possible with turnips, that we can use during the present winter and spring.

This is true economy, for we put our straw to its proper use, as the absorbent of all the manurial elements that are passed by an animal richly fed.

I feel assured that high feeding will pay this winter, for the demand for well conditioned cattle next spring and summer will be great; but such high feeding must be performed with the same judgment as shows grain to be a cheaper food this season than hay or straw.

"Many a muckle mak's a mickle," says the Scotchman, and he is in some things the prince of economists. It is upon the many savings of animals' fodder, and of animal manure, that the success of farming depends.

I have seen straw-stacks this winter, which, if I had them in my own barn-yard, would make the third part of some hundreds of loads of manure worth 75 cents a load, lying wet, frozen and rotten in their yards. As they stand, even when completely rotten, 100 loads of such are not worth five loads of good, hardly compacted, covered manure.

My neighbour and I have not actually made a wager, but we are watching for the results of our two plans of operations with regard to our hogs, with as much interest as if a great stake depended upon the issue. He, in view of the low price in the fall, and I suppose looking forward to high prices of grain, sold nearly every hog in his possession at some such prices as 4½ or 5 cents per lb. I kept a fast hold on every one, and even bought two choice breeding sows to winter. I did not kill my nine months' hogs; I was just about to put them up to fatten, but changed my mind, and bought my pork at \$5 per cwt. dressed.

My hogs would have been killed with a certain amount of feed at perhaps 150 lbs.; they would have been worth \$7 50 apiece. Now, I winter them over, and keep them just moving in growth on boiled turnips, swill,

and *tearmth*, and after next summer's pasture and the same amount of grain that they would have had this fall, they will probably turn off 300 lbs. on an average, and be worth \$3 per hundred, or \$24 apiece.

Although, as a rule, I cannot advocate wintering over hogs, yet it is better to winter over than to throw them away.

C. E. W.

### Sheep.

#### NO. III.

The feeding of all live stock is, in Canada, undertaken by the majority of our farmers, with no recognized course in view. Many a farmer, when asked what sheep he is going to keep over next winter, cannot answer the question; far less has he already selected such lambs as he intends to fatten when they are first weaned. Now, periodically, a flock of sheep should be carefully looked over, and the ewes that are not in a perfect condition for future breeding should be weeded out with a view of killing them to advantage.

The greatest seasons of demand for mutton are here at Christmas and at Easter. We should then endeavour to have such sheep as we wish to sell to the butcher in readiness at either of these two seasons. A semi-annual weeding of the flock is then necessary.

If a sheep has over-past her period of gestation from the time that the ram was taken from the flock, we may be well assured, unless she show immediate signs of lambing, that she is not with lamb. In order to ascertain this with certainty, we would have every farmer remove his rams from the ewes, at the latest period, dating from which he would like to have lambs come in the spring. We think it a great mistake to have ewes coming in at intervals all through the summer, and we consider a midsummer lamb altogether an unprofitable animal.

Say that early lambs are required, then let the buck be put with the flock early in September, the main bulk of lambs will come in the first half of February, (none too early, we think, when proper accommodation can be found for the ewes.) He is a very poor tup that does not cover all his ewes in one month; but allow him six weeks, and all the stragglers will have come in by the end of March, and are still early lambs.

Again, if we desire lambs to come when there is pasture, they need not come before the middle of April; and if the buck be given his six weeks' law, a few may arrive in the end of May, which will be late spring lamb.

We consider the plan too often followed by many farmers, of allowing lambs to take the ram when only five or six months old, to be highly injurious, and we trace to this custom the fact that we see so many small and stunted sheep throughout the country. Fifteen months is the youngest age at which a ewe should be served. We should then weed out just after lambing season. If there be any ewes who have refused the buck, it is good time to fatten them for the Easter

market, when, owing to the presence of large quantities of spring lamb, large mutton is greatly in demand.

If pasture prove short, the male lambs can be sold with profit for Easter and summer market; while if kept until the following Christmas, they will dress to a great weight.

Commend us to early lambs. The ewes will take the ram better in the warm days of September than later; will fall feed better when in lamb; will lamb with more success in the early spring in the fold than later in the field; are better looked after before the busy throng of work comes on in the spring; make better and richer milk when judiciously fed, than upon the early grasses; and the lambs are large, and able to stand castration before the warm weather sets in; can be weaned in the very height of plentiful pasture, and cut their maximum weight of wool in the ensuing spring.

#### SHEARING.

We have seen this operation performed in Canada with such carelessness that at the risk of dwelling too much upon a subject, a full discussion of which has been so often found in our columns, we would yet again devote a few lines to this important subject.

Closely connected with, and preparatory to the operation of shearing, is that of washing, and upon the thorough effectiveness of that operation depends in great part the sample of the wool for our Canadian markets.

Now, in washing, we have to contend with two antagonistic principles—to free the wool of all superfluous dirt, and at the same time not to lose the essence of weight, or the oil of the wool.

It is thought by many that running water is the best adapted for the thorough cleansing of the wool, and for this reason we have frequently seen flocks of sheep driven two or three miles along a dusty road to a rapid stream, into which they are hastily plunged, and from out of which they are as quickly with drawn.

The effect of this is to wash little or no real dirt from the wool, for the water is in its very nature hard, and any oil from the wool that may have been freed is carried away by the rapid current.

Now, we greatly prefer a roomy pond of clear stagnant water, with a hard bottom; and if this pond be formed by damming up a stream, so much the better, as there is a constant gradual current slowly changing the water. In this water, after a few sheep have been thoroughly washed, is deposited sufficient of the oily matter or "yolk" of the fleece, to form an excellent soap, and the water containing this is far better adapted to remove impurities from the wool than is the clearest of rapid running streams.

Moreover, such water having been for some time comparatively stagnant, and under the influence of a hot sun, does not afford such a shock to the sheep when plunged in as does well water or a cold clear stream.

The sheep, if we wish to show a No. 1 sample of wool, must be turned directly from the water upon grass land; for if driven along a dusty road, the wool becomes black-