

For storing cabbage the best plan is to dig a shallow trench in a place where winter snows cannot lie; then pull up the cabbage and put them in the pit, the heads undermost, and cover with earth to the depth of six inches, leaving the roots exposed. In this way they will keep safe till spring.

All the live stock on the farm should be carefully attended to and well fed this month. If neglected, they will fall away in condition, and to restore that condition when they fall away is a far more difficult matter than to preserve it when gained. Cattle should be in good condition when housed, and that condition maintained throughout. A few acres of turnips, mangolds and ruta bagas, with hay and the straw of the farm, if well saved and judiciously fed, will bring the farm stock round all right to the season for pasturing and soiling. Cleanliness, warm housing and regular feeding are necessary.

Feeding hogs well now will save much food later in the season. They will not fatten so quickly in the cold winter, nor at so little expense.

Sheep demand the farmer's care. A field of good aftermath, if given up to the sheep, will pay well in their healthy thriving; and a little grain fed daily will be well repaid in the spring and summer. No stock on the farm pays better than sheep.

The horse needs good grooming and good feeding; then he will do us good service and pay double for every pound of his provender and all the attention of his owner.

Our Grain Crops.

THE COST AND PROFIT OF RAISING OATS.

In the consideration of what grain to sow for our spring crop, we must not base our estimates on the results of one season. It is necessary to take into account the average returns of past years and the probabilities of the future. This season our wheat crop has been fairly remunerative; the returns from our fields of fall wheat have been much better than was anticipated in spring, and the yield in some places was really good, teaching us another lesson—not to form our judgment from present appearances. The spring wheat crop is reported from all parts of the country to have been one of good yield. Though the price is not high, it is not so low as that of 1874, and there is a brisk demand, with an expectation of an advance in prices.

Barley has realized our expectations. Last fall, and again in spring, we expressed our opinion that barley would prove a remunerative crop. Our opinion was founded on the greatly increased and increasing demand for malting barley, and the limited area within which it could be successfully grown. We now know the profits from the crop. The yield has been unusually large, and prices fairly remunerative. The price at present in Toronto is 95c. to 99c. per bushel; in New York, \$1.25 for Canadian barley; while the yield has been in some instances very heavy, as high as 60 to 70 bushels, the yield generally being not less than 40. For malting barley the high prices are paid, but any, tolerably fair, will find a good market for feeding, if not for malting.

Oats have been a profitable crop to the grower this year; the produce has been heavy and the prices such as to pay very well. The demand for oats has been steadily increasing for some time, and the prospects are for continued increasing demand. The superiority of oats for feeding horses has been fully established, and to enable them to go through the heavier work and maintain the greater speed demanded by high farming and improvements of the country, they must be well fed. And it is not

only as food for horses and other stock that there is an increasing demand for oats. Oatmeal is more prized as an article of food for man than it has heretofore been in this country. Agricultural and medical journals advocate its use to increase the strength and improve the health of young and old, and the consumption of it has greatly increased. In illustration of this increase, we may mention that there are now in this city two steam oatmeal mills, where there was not one a short time since.

With the brisk demand there is good price, such as will fairly pay the farmer for his outlay of labor and money. The market notes of Toronto give 40c. per bushel; of New York, 35c. to 50c., and in every market there is a demand for oats of fair quality. The great question with farmers, as well as other business men, is "Does it pay?" Let us see if the growing of oats pays. We will take a field of ten acres, with the expenditure and receipts:—

Plowing and harrowing 10 acres, at \$3 per acre.....	\$30 00
Seed—2½ bushels per acre; 25 bushels at 50c. per bushel.....	12 50
Sowing seed, 2 days, at \$1.50 per day.....	3 00
Cutting, 60c. per acre—\$6; binding, 5 men's work at \$1.50 per man.....	13 50
Threshing (expenses included), 5c. per bush. 20 00	
Marketing grain and rent of land estimated equal to value of straw for feeding and manure.....	60 00
	\$79 00

Estimated yield, 40 bushels per acre—400; estimated price (3s. York) 37½c. per bushel—\$150.

Cost per acre, \$7.90; cost per bushel, 19½c. Net gain—\$7.10 per acre.

The profit to a farmer of an oat crop may, of course, be higher or lower than the above calculation represents, as the yield and the market price may be, but this has been for some time a fair average, and the expenses are from the writer's own knowledge. The straw is certainly not overvalued. We doubt if its value as fodder is sufficiently appreciated. When cut before it is hardened and sere by over-ripening, it is, if carefully handled, well saved and preserved, not inferior as provender to some hay that we have seen. We fed our store cattle on oat straw with a small portion of cabbage and roots for years, and, when turning them out to pasture on the 12th of May, they were in better condition than much of the stock of other farmers that had been fed on hay. We have had ample proof of its value in feeding. "The proof of the pudding is the eating of it." Let cattle be well cared for, their stalls warm and clean, and the house properly ventilated. Let them get fresh, sweet straw in the evening, again at eight o'clock, and again at six o'clock in the morning, as much as they can well use; straw thus fed daily, with a few pounds of turnips, will support dry cattle well through the winter.

While thus calculating the profits we may reasonably expect from a crop of cereals or roots, we cannot forget that a farm on the whole pays no such profits. There is a portion of the farm that brings in no return of dollars and cents to the farmer's exchequer. There are waste places occupied with fences, farm buildings, woods, and other non-paying acres; but with all the drawbacks, the farmer can make his profession pay fairly—not more, certainly, than he is entitled to. His labor of body and of mind should be well paid. The risks of loss of live stock and crops, and the investment of capital can only be compensated by liberal profits in his business; and we must not omit the oft-repeated fact that only good farming pays a profit, or even a laborer's wages to the owner and tiller of land.

Fattening Sheep.

The necessity of keeping horned stock well housed has been continually impressed on the minds of stock feeders by the agricultural press. If cattle be suffered to remain exposed to the extreme cold of winter, with its alternate rains and frosts, the food given to them to keep up or improve their condition is wasted. Much of it is necessarily used up to supply that heat that they should have from good comfortable winter quarters. From the want of this provident we see so many cattle in March and April apparently half-starved, though the consumption of food has been as great by them as by those that are as plump and sleek as if they had been fed on the best grain of the farm.

In fattening beeves this important item is not lost sight of, but we should remember that it is as essential in fattening sheep as it is for other stock. In proof of this we give two instances published in the Journal of the Royal Agricultural Society:

"One hundred sheep were placed in a shed, and ate twenty pounds of Swede turnips each per day, while another hundred in the open air ate twenty-five pounds, and at the end of a certain period the former animals weighed each three pounds more than the latter, plainly showing that, to a certain extent, warmth is a substitute for food. This was also proved by the same nobleman in other experiments, which also illustrated the effect of exercise. No. 1.—Five sheep were fed in the open air between the 20th of November and the 1st of December; they consumed ninety pounds of food per day, the temperature being about 44°; at the end of this time they weighed two pounds less than when first exposed. No. 2.—Five sheep were placed under shelter, the temperature of which was 49°; they consumed at first eighty-two pounds, then seventy pounds per day, and increased in weight twenty-three pounds. No. 3.—Five sheep were placed in the same shed, but not allowed any exercise; they ate at first sixty-four pounds, then fifty-eight pounds, and increased in weight thirty pounds. No. 4.—Five sheep were kept in the dark, quiet and covered; they ate thirty-five pounds per day, and increased in weight eight pounds."

A similar experiment was tried by Mr. Childers, and is thus related in the same journal:

I last winter enclosed a small yard with posts and rails, and erected a thatched shed, just large enough to allow a score of sheep to lie down at once. The floor of this shed was boarded with rough slabs. I then proceeded, on the 1st of January, to draw forty wethers out of my flock of Leicester, and divided them into two lots, as equal in quality as I could get them. On weighing each sheep separately I found the weight of one score to be 2,565 pounds, and that of the other 2,580 pounds. I put the first lot into the yard and placed the other lot on turnips. The field was a dry, sandy soil, well sheltered and peculiarly favorable for sheep. Each lot had exactly the same quantity of food given them, and the results were as follows:

As many cut turnips as they could eat, which was about 378 pounds per day for each lot. Ten pounds of linseed cake, being at the rate of half a pound per sheep per day; half a pint of barley per sheep per day, and on each day a little hay and a constant supply of salt.

For the first three weeks both lots consumed equal portions of food, but in the fourth week there was a falling off in the consumption of the wethers in the shed of fifty-two pounds of turnips per day, and in the ninth week there was also a falling off of twenty-eight pounds more. Of linseed cake there was also a falling off of three pounds per day. The wethers in the field consumed the same quantity of food from first to last. The result of the experiment was as follows:

20 Shed Wethers.	Increase.	20 Field Wethers.	Increase.
Pounds.	Pounds.	Pounds.	Pounds.
Jan. 1....2,565	...	2,580	...
Feb. 1....2,870	305	2,794	214
Mar. 1....3,020	150	2,914	120
April 1....3,355	335	3,092	178
Total	790		511

Consequently, the sheep in the shed, though they consumed nearly one-fifth less food, made above one-third greater progress.