of Amberley, a colt who has been running this year, onto the offspring of Russel and Outscramble. The name betrays a conscientious endeavor that may elude the casual reader. When the Prime Minister of England, who let the Alabama escape, and who had led the Commons as Duke, was elevated to the House of Lords as Lord Russell, he chose for his second title Lord Amberley; and thence a happy combination exactly commemorating this colt's genealogy. I only quote it to show what may be done with apparently unpromising materials."

#### Grooming Draft Horses.

Editor "The Farmer's Advocate"

Would you ask through your columns the opinions of horse-breeders what are the advantages of grooming or currying colts that are being raised for draft purposes, or whether it is better to let them run loose in a box stall with plenty bedding and fresh air? My reason for asking this is that an agricultural speaker was criticising the method used at a horse-breeding farm in Nova Scotia, where the colts are never curried.

N. S. SUBSCRIBER.

# LIVE STOCK.

#### How Are Your Stock Watered?

1st.—Describe concisely, for the benefit of other readers, how your stock are watered in winter. 2nd.—What did your system cost to instal, and how long has it been in use?

3rd.—What are its advantages or disadvan-4th.-What plan, if any, have you seen that you

consider better?

#### Profit and Loss in Beef.

Leaving aside the ranch, none of the systems of beef-production so far considered seem to offer very great inducements in the way of profits when feed is all paid for at market or even at fair prices.

Probably, to begin with, a brief examination into the items which go to make up the cost of the stocker ready to feed would prove interesting. Pasture usually enters very largely into the raising of the stocker, hence the cheaper the lands on which cattle are raised, the lower will be the cost of production up to the time they are ready to finish off. Now, steers under average Ontario conditions must have at least two acres of pasturage each per season. The poorer the pasture the more will be required, so that it is not safe to say less than two acres of good land or the equivalent thereof, worth, say, \$6.00 per season per steer. Each steer would be on grass two seasons; that is, \$12.00 per steer for pasture up to age of 30 months. The winter between grasses would cost from \$12 to \$15, according to the method of feeding, the more expensive feeding being probably the more profitable. From birth to one year old, ready to go out on grass, each steer would cost about \$16 for feed alone. This would make a total cost of \$40 to \$43 for the steer ready to go into the barn to feed, and he might possibly weigh from 1,100 to 1,200 lbs. Good shapes at this weight would be worth under average conditions, from 33 to 1 cents. If we say 33c. net for the farmer, f.o.b., Toronto, he would get about \$43.

Of course, a happy combination of circumstances might arise to lower the cost of production a bit and to raise the selling price. springs eternal in the human breast." We may still hope on, even if, in the above calculation, no value has been placed on the calf when dropped.

Still, there is no doubt the cheap-land man will be always willing to produce stockers, for he can really make a somewhat better showing than outlined above, as he would be forced to waste much coarse feed did he not do something in this or some similar line.

For the dear-land man there is another and a brighter side, even apart from the buying and feeding of these stockers or feeders. He may, if numerous-one might also say numberless experiments are to be trusted-go into the beef-producing business in all its stages, from breeding herd

to block, and make a most excellent showing. Well-bred, spring-dropped calves, fed on whole milk for a couple of weeks, on whole and skim milk for a couple of weeks, and later on skim milk, finely-ground meal, sweet clover hay and a little green feed till November, are then in good shape to go ahead and do well on fairly heavy meal feed, say from three to four pounds per day So fed, they may be expected to weigh from 650 to 750 pounds when ready to turn on grass a May. On good grass, with a little meal and rape, if necessary, from 900 to 1,000 pound weights may be expected by November. Good feeding during the winter means 1,200 to 1,300 pounds, ready for the block any time from Mairi to May, or earlier.

During the past few years different lots of steers have been fed here from birth to block much as indicated above. An accurate record has been kept of food consumed, showing that, on an average (20 steers), a steer fed as above consumes 1,500 pounds skim milk, 3,000 pounds the-by courtesy-'Lord' John Russell, son of a mixed meals (oats, corn, bran, shorts, gluten and oil cake), 1,000 pounds clover hay, 4,800 pounds roots, and 11,006 pounds ensilage and green feed. These feeds, valued as follows: Skim milk, 15 cents per cwt.; meai, 1 cent per pound; clover hay, \$7 per ton; roots and ensilage, \$2 per ton, amount to \$51.55. During the same period these steers have averaged 1,250 pounds net, and have sold at an average of \$5.56 per 100 pounds, live weight; that is, \$68.75 each at about 23 months old. This leaves a margin of about \$17 per steer, made in 2 years or less.

A not inconsiderable advantage of this method of feeding is that the steers are ready to sell at any time after 10 or 12 months of age, for not infrequently a trim, fat young steer will tempt a good round price where the heavy steer would not be so seductive.

We have sold steers here at 13½ months old that brought \$44 apiece, and had cost, all expenses included, something less than \$30-to be exact, \$28.40. They weighed 917 pounds alive, and sold for 5 cents a pound live weight, with a slight shrink. They were sold July 2nd, 1906. Similar lots have been sold at different ages in different years. This is the youngest lot we have ever sold. It is also the lot on which we made the highest per cent. clear profit.

The old idea that pigs had to be fed till they were a year or so old and weighed 400 to 600 pounds, has been exploded. No one thinks for a moment of pursuing such a course in his pig-feeding operations. Not only because the smaller pig is demanded by the packers, is this true, but because it has been most abundantly proven that heavy pork costs very much more to produce than does light pork. Exactly the same truth holds good where the steer is concerned.

In experiments conducted here during seven years, it has been shown that well-bred steers, receiving good care and good feed, cost to produce 100 pounds increase, live weight:

From	1 day to 2 months	\$2.14.
From	2 months to 4 months	2.50.
	4 months to 7 months	
From	7 months to 12 months	3.90.
From	12 months to 18 months	4.15.
From	18 months to 24 months	4.65.



Bacon Type Berksbire Sow.

Brel and owned by Josh. Lawrence, Oxford Centre, Ont.

This is where steers were well fed from birth to block. These figures indicate wherein lies the advantage of early seiling. The longer the animal is fed, the more expensive becomes the increase in live weight.

Probably the relative merits of the different methods of feeding may be most graphically shown by a comparison of the percentages of profit (or loss) on the cost of producing the steer by the different methods that have been discussed or that we have tried here, speaking in round numbers always:

Whey Steer.—Cost, \$60; sold, \$10; loss, \$20; loss, 50 per cent.

Cow-raised Steer,—Cost, 875; sold, 865 Loss, \$10 (or more); loss, 15 per cent.

Skim-milk Steer, fed till three years old. 'ost, \$65; sold, \$65; clean sheet.

Skim-milk Steer, fed till two years old.-Cost 850; sold, \$65; profit, \$15; profit, 30 per

Skim milk Steer, fed till eighteen months old. -Cost, 838; sold, 855; profit, 817; profit, 45 read the different opinions of farmers.

Skim milk Steer, fed till fifteen months old, Cast, 830; sold, \$15; profit, \$15; profit, 50

While these figures may seem somewhat start-Lag, I may say that similar results have been earing so as to get steers to the block at as

passibilities of these lines of feeding are

#### Down on the Dogs.

Editor "The Farmer's Advocate"

I noticed in your issue of Jan. 17th an article by Mr. Alex. McCaig, in which he complains of the injustice of taxing dogs and using the moneyto reimburse the owners of sheep for their losses through the ravages of the wolfish brutes, most of which are not worth (aside from the value of their skins) the powder it would take to blow them out of existence.

He suggests that the tax remain at \$1.00  $\mathrm{per}$ dog, to be applied to the general fund of the municipality, and that sheep owners (with all they have to contend against now by having the labor of years undone in an hour or two) should club together and protect themselves. Yes, they should club together to defend themselves, but not by allowing anyone or everyone, by the payment of a paltry dollar, to keep a curse to the sheepman, a menace to the traveller on the highway, and a nuisance generally to the public; but honestly begin at home, and if they have in the past been misled with the idea that a dog was a necessary adjunct to every house, destroy the thing, and take some general way of getting a petition signed by every sheep owner in the country stating that he does not own or keep a dog, and send it to the "powers that be," praying for a tax of \$5 or \$10 per head, at least, to be kept as a fund from which sheep losses could be paid in full each year, and the rest used for such purposes as might be most needed by the municipality. Under such a tax, "the good dogs," (mine, of course-not my neighbor's), "the dogs worth more than any cow on my place," dog that money would not buy," etc., would soon be found not worth quite so much, and would grow beautifully and blessedly less, and the peaceable and profitable sheep would have a chance to show its real value to mankind.

Durham Co., Ont. R. S. HOLDSWORTH

### Prefer Sweet Milk for Weaning Pigs.

In reply to your questions for hog-raisers, I would say, first, that I prefer not to wean pigs under six weeks old. In case one had sweet skim milk, he might wean them at five weeks, and maybe less, according how they ate. Do not wean under six weeks when you have no sweet skim

I would provide the little pigs with a little trough by themselves, so they could go under a partition into another apartment from the sow. When I noticed them eating a little with the sow, I would keep them some feed by themselves when fed her. Little pigs don't generally eat much under four weeks of age. I would prefer altering the pigs two weeks before weaning.

I would prefer equal parts of shorts and fine oat and barley chop- | eat chop, | barley chop, shorts-providing I had milk. Without milk, would add a little more shorts.

I should judge good pure whey would not be worth any more than 10c, per cwt. Skim or separator milk, I think, would be worth 20c. a cwt., anyway. I have not had much experience with skim milk, but I would think not too sour for weanlings, but for shoats of 75 or 100 pounds it would not make much difference whether it was JOHN HAMILTON Oxford Co., Ont.

## Management of Brood Sows.

I noticed an article in a recent issue on the care of brood sows. I keep two sows, from which I raise two litters each year, and I have always been successful in raising good litters from them. They are of the Yorkshire White breed. Every winter I let them run around the straw stack, and they sleep in the straw. All I feed them is about a bushel of mangels a day. When the pigs are born in the spring of the year, they are strong and healthy.

I notice a reader of your paper asks what is best to destroy lice on cattle. My experience is that dry sulphur, sprinkled from the nose to the tail of the cattle, is effective. I can always tell when my cattle are commencing to get lice on them: when the chains begin to rattle, you may be about sure they are getting itchy. I am very much pleased with your valuable paper, as it gives a lot of information, and it is interesting to )

Ontario ('o., Ont. J. E. HINKSON

W. P. C., of Huron Co., Ont., sends us an inquiry about a feeding steer which died from gorging himself on meal. His name is not on our lists at the post office he gives. If it is on anywhere else and we are advised to that effect, the

What shall it profit a man to produce a few more pounds of butter to-day and a degenerate