Total increase value of steers over first cost, $150.00.	
Net cash profit from two acres land	$ 75 00
Net fertility added to farm from purchased feed	50 00
Gross profit from two acres	$125 00

In making the last example to occupy the same amount of land as the first, we have—5 acres of corn and 5 acres of clover hay, and a purchase of $200.00 worth of feed; this fed to 25 steers, we have the following result:

Five acres of corn cost	$ 100 00
Five acres of clover hay	25 00
Purchased feed	200 00
Additional expenses	50 00
Total cost	$ 375 00
Total net gain of value of steers while feeding over purchased cost on 25 steers, $750.00.	
Net profit to balance	$ 375 00
	$ 750 00
Net increase of fertility added to farm	250 00
Total gross gain	$1000 00

It is here understood and figured out that it is quite possible to obtain as much or more nitrogenous, carbonaceous and fat elements of animal food in the $40 00 worth of purchased food in the open market than is contained in the 9,500 lbs. of grain which is grown on 8 acres of the farm on which it is fed.

It is here asked to give a full analysis of the above comparative examples why such difference of cash and fertility results are obtained on the same area of land (10 acres) worked out under the two described separate systems? Any answer proposed it is desired to have printed in the columns of the FARMER'S ADVOCATE.

D. M. MACPHERSON.

Notes on the New Tariff Reductions.

As we go to press the new Canadian tariff is announced. Among other changes, corn, on which formerly a duty of 7½ cents per bushel was imposed, is now free for all purposes (seed included) except for distillation. This to the increasingly large number of farmers who feed all or nearly all their coarse grain, and many of whom find it profitable to buy largely of such feed for stock, will, no doubt, be welcome, since there are frequently times when with a heavy crop of corn our neighbors across the line have a large surplus and the price runs so low that feeders in our country can buy it to advantage; and sometimes by selling oats and peas when prices are good for these, they can buy corn at a price which gives a clear profit in the transaction. There is probably a considerable number of farmers who depend mostly on the raising of grain for sale and who will certainly not view with favor the free entry of corn which will come in competition with coarse grains in the market here, but we think it is sound doctrine to declare that the true system of farming for the present day in Canada, and especially in the older Provinces, is to feed most, if not all, their coarse grain on the farm or to exchange for cheaper feed stuffs to keep up the fertility of the farm, marketing the grain in the shape of beef, pork, mutton, and dairy products. In fattening cattle corn will be particularly advantageous since the British embargo on one hand and the Dingley Bill on the other prevent the export of "stockers." There is no doubt that corn may be used to good advantage and with very satisfactory results, especially if mixed with ground oats and bran, in fattening cattle and in feeding dairy cows for butter production, though it is necessary to avoid grinding a large quantity at once, as it is liable to heat and become musty; but we would not advise feeding it exclusively or largely to hogs, as the experience of our neighbors with hog cholera, which it is generally supposed is aggravated if not traceable to a great extent to a too exclusively corn diet, should warn us, but if judiciously fed in connection with other less heating foods it may serve an excellent purpose and is a very handy feed to dispense as a partial diet to hogs running on grass.

Binder twine is another article on which a reduction is made, and which is to be free after January 1st, 1898. This is a change which will be approved by all farmers, since all are alike interested in cheapening harvesting operations, and the change will not work any special hardships for our home manufacturers since the raw material and all articles upon which duties are levied which enter into the cost of manufacture of binder twine will for this purpose be free from that date.

Barbed wire and other fencing wire is subjected to a reduction, and will be free after Jan. 1st, 1898. It is certain, with the disappearance of timber, that wire will be more largely used for farm fencing as the years go by, and all farmers are interested in obtaining cheaper fencing. Wire is already a staple material for that purpose. Several very satisfactory lines of wire fencing are now on the market. The material for their manufacture admitted at a reduced tariff will lower cost of production.

The duty on agricultural machinery, such as binders, mowers, etc., remains as it was under the old tariff, but the duty on the raw material has been reduced, and this should enable manufacturers to reduce the price of the finished article. Reductions have been made on many of the minor implements, such as shovels, etc., used on the farm, and a slight reduction, one cent per gallon, on coal oil. The feeling in the West, especially, was for more radical reductions, but a variety of interests must be considered, and it is a question if the matter of freight rates is not quite if not a more serious burden with the great grain and cattle producers.

The plan commended in the ADVOCATE for April 1st of reducing the tariff against imports from Britain is a feature of the new tariff that will develop trade in that direction wonderfully and fit in well with the cold storage system.

Under this Bill Government retains power by order-in-council to place on the free list any article in respect to which a combine or trust has been formed to enhance the price at the expense of consumers. Rightly used this should be effective.

STOCK.

Horse Famine Close at Hand.

The short crop of colts for the last few years will begin to tell on us soon. The Kentucky Stock Farm has found by corresponding with the different assessors throughout the horse-raising sections of the country that in some localities there are only 5 per cent. of the regular crop raised, and in no places more than 10 per cent. has been foaled for the last three years.

The visible supply of American horses in 1894 was 16,000,000; in 1896, 15,000,000; and it is predicted by good authority that before the close of the year 1897 the visible supply will be nearly the 14,000,000 mark, and judging from every indication there is a great horse famine close at hand, for with returning prosperity, which is sure to come, and with it a great increase in demand, and as the law of supply and demand governs all prices, an increasing demand with a short supply means that before horses can be bred and produced for the market they will be extremely high.

Do Not Neglect the Flock.

As the warm spring weather comes on the animals about the yard become restive and discontented, and unless we do something towards supplying conditions for their contentment we, as well as the animals, will lose by it. The sheep flock especially needs more attention at this busy season than most of us are inclined to bestow. Too many are inclined to follow the old custom of allowing them to wear their fleece away along till June. This, with a moment's reflection, must show itself as utter folly. Horses, cattle and people shed their winter coats in spring for lighter garments, but the poor sheep very often has to bear the much heavier coat than any of the others have to wear through some of the hottest days of the whole season. This is not only inhuman but very unprofitable neglect. A sheep has no use for its fleece after May 1st in an ordinary season. At the time of shearing the hoofs should be pared into natural shape. A second provision the shepherd should make at this season is that of allowing the flock to get some fresh grass. Where one has no ensilage and only a limited quantity of roots, the succulence of the green grass will make their hearts glad and their lambs grow in a manner to please and profit the person who cares for them. It may not be wise at this season to put them on pasture or meadow, but almost every farm has fence sides, lanes, and by-places that will afford a bite for a couple of weeks, supplemented by the evening and morning supply of clover hay or other dry food. When first turned out in this way, any that are not shorn should be carefully docked with the shears, so as to prevent the befouling of their hindquarters should the grass prove too laxative.

We would not forget to remind busy farming shepherds that immediately after shearing is the proper time to get after the ticks. A small amount of dip will at this time go a long way towards exterminating the vermin of a large flock. The lambs especially need attention in this regard, because ticks, like men, prefer "spring lamb" to "mutton," and seem to find it very quickly when once the warm weather arrives, and we need not be told what effect a few dozen or even individual fat ticks must soon have upon a lamb only a few weeks old.

Mr. Edwards, M. P., Discusses Steer Feeding Methods.

To the Editor FARMER'S ADVOCATE:

SIR,—We are in receipt of the April 1st number of the FARMER'S ADVOCATE, in which is given the result of the steer-feeding experiment on the farm of the Hon. Wm. Mulock, Postmaster-General, the publication of which you say has aroused widespread interest among feeders, and upon which you desire an expression of opinion from us, we having pursued the same system of feeding for some years past; and to your request we cheerfully respond. And let me say at once that I consider the results achieved by Mr. Mulock's manager very superior results, and such as have not at any time been accomplished by us. His steers, no doubt, were of the primest quality: all the conditions must have been as favorable as they could be and his feeder a man who thoroughly understands his business. As for ourselves, we have never made a similar test. Since we began dehorning and feeding loose we have not forced by high pressure during the winter months, but have fed moderately and have finished our cattle on grass, generally turning them off in July or August, and so far as our experience goes this is the system we most approve of. The point, however, which no doubt is exciting the interest of feeders in Mr. Mulock's experiment is the very superior gain in weight made by the animals fed loose over those tied up; but that a superior gain was made is no surprise to me. Previous to dehorning and feeding loose we fed for some years tied up in the old-fashioned way. We have now dehorned and fed loose for some five or six years, and we think the latter much the better way for many reasons, among which are the following: We think it much healthier and better for the cattle, much more comfortable, and that on an even amount of feed they will make a much better gain. Buildings for this method of feeding are much less costly of construction than buildings for fastening the cattle in the old-fashioned way; arrangements for watering the stock are much more conveniently carried out, and the cost of labor in feeding is greatly reduced; and last, but not least, under this system farm manure is preserved in a much better way than any that in my judgment I know of, and here comes the only point on which I am disposed to criticise or differ to some extent with Mr. Mulock's construction of building and his practice; and I simply give my opinions for what they are worth, based upon past experience. To use a cement floor is not necessary. A clay, gravelly or sand bottom, so long as it is dry, is all that is required. And while a cement floor may be put in at will, at same time no material loss of liquid manure will be sustained when a fairly good, dry earthen bottom can be had. Next, I think twelve feet between floor and ceiling not sufficient. I think greater depth desirable, and to accomplish this without getting too high up as a result of the winter's accumulation of manure, in the construction of our buildings we excavated about four feet below the surface. This gives abundance of room for manure, which, in my judgment, is of vital importance, and instead of drawing out at all during the winter months, I consider it better practice to haul in the horse manure as it is made and spread it in the steers' building, thus incorporating the two, and haul out in the spring or autumn as is found suitable. Our practice for some years has been to haul out in the autumn and use the whole for top-dressing, and I will say that I have never seen as well-preserved manure as we have had since beginning this practice, and I hope I may be pardoned for saying that if this system were uniformly practiced throughout Ontario it would be worth some millions of dollars annually to our Province. Sincerely congratulating Mr. Mulock on the good success of his experiment, and with best wishes for his efforts in the interests of agriculture, I am, yours truly,

Russell Co., Ont. WM. C. EDWARDS.

P. S.—I notice I overlooked a question asked by you. In this system of feeding we have never known any difficulty in the way of the stronger taking advantage of the weaker animals. They more resemble a flock of sheep than anything we know of. W. C. E.

Strong Evidence in Support of Feeding Steers Loose--Seven Years' Experience.

To the Editor FARMER'S ADVOCATE:

SIR,—In answer to your letter of inquiry about our mode of feeding steers, will say in regards to feeding steers loose in box stalls we have been doing it since the year 1891. My attention was drawn to it in the year 1891 in Glasgow, being acquainted with some of the Forfarshire cattlemen who were buying our stockers with horns on, taking them out in the country, dehorning, and feeding them loose in box stalls and taking them finished back to Glasgow. The advantages struck me forcibly. We have been feeding about forty head a year, keeping from three to fifteen loose in stalls. The size of stalls are 40 feet by 22 feet and some 12 feet by 15 feet. We approve very much of that plan. They keep their feet better, remain cleaner and more healthy, and their flesh is firmer and more marbled. They can be fed with less danger and we believe the feed does them more good. As we turn them out on grass to ship out in July we consider that manner of feeding much better, no one animal takes advantage over another in getting more than his share of the meal. We have been feeding steers for about thirty years and we could not be persuaded to go back to the old way of tying them in stalls. We would prefer dehorning them at from twenty to thirty months old. When dehorned younger they bunt more. We have experienced no difficulty in putting strange steers together after they were dehorned. Some pens we clean out three times through the winter and some not until spring. One great advantage here—the manure is all kept under cover and the urine and solids are all mixed together; we by this means get the full benefit of the manure.

Wishing your valuable paper every success,

Yours truly, A. & D. BROWN.

Elgin Co., Ont.

Fed Four Steers Loose.

To the Editor FARMER'S ADVOCATE:

SIR,—In common with many others I was greatly interested in the experiment conducted by Mr. Mulock, M.P., with regard to the fattening of cattle loose vs. tied, as reported in the ADVOCATE of April 1st. But I had great hesitation in complying with your request to give my experience in fattening cattle loose. First because it is limited to this season, and second, as the cattle were not weighed in, and are not yet weighed out, what I can say on the subject will be very largely opinion, not fact. Last fall, as I had more feed than the cattle for which there was stable room could consume, I decided to fatten four steers in what we call "the shed"—where the manure is stored and where the two-year-old cattle spend the winter. It is not open, but quite snug and comfortable, about 30 x 50 feet. I did not think these cattle would do nearly as well as the others, but thought it was better than having good feed go to waste. There were eight cattle in all in the shed; tied up when eating corn, grain or roots, the rest of the time loose with free access to straw. It was soon noticed that the cattle fattening there cleaned up their cut corn better and would eat more of it than those tied up. Also on being let loose they would eat straw sufficient to keep them