

vantageously situated for the purpose, for sheep love the hills, and I am in the valley. Still, I can testify that they are profitable even here, when they can be protected. E. C. BARNETT. Highwater, Que.

### Cause and Effect

Editor "The Farmer's Advocate":

The policy of both political parties has been to bonus and protect the cities, at the expense of the country. The census shows that many thousands of the young and strong have left the farms of Ontario (as producers), and many, many thousands have been added to the cities as consumers, in ten years. Why should surprise be expressed or complaint uttered at the high price of living?

This is simply what legislators asked for, and they got it.

Then, the middleman gets his legitimate share, which adds greatly to first cost.

But the city dweller, from a high sense of modesty, pays a man and horse with his delivery rig to carry his market basket—another big slice. Yes, truly, living is high, but usually the farmer gets less than half what the consumer pays.

If about half of those middlemen and delivery-men would come on our Ontario farms, we could easily double the production of those farms—not in bushels of grain, for very much depends upon the moisture in the soil and weather while ripening, over which we have only partial control. But if we keep abundance of humus in the soil by the use of barnyard manure, and by frequent seeding to grasses and clovers, the loss by unfavorable weather would be greatly reduced.

But our great expanse would lie in larger fields of alfalfa, capacious silos, greatly enlarged acreage of corn, roots and field pumpkins, and other feed. With these crops we have far more control of conditions than in grain crops. If we work our corn and root ground as soon as dry enough in the spring, and keep surface mellow, thus retaining the moisture in the soil till seed is planted, with heavy manuring and careful after-culture, even an unfavorable season will be abundant.

Give the Ontario farmer efficient labor, and his ability in the production of feed crops is not easy to limit.

Last fall we had our barn nearly full of cut straw, alfalfa, timothy, mixed hay and millet; two silos full; a root cellar flowing over into the stable. Continuing this discussion, I will tell of the many problems we meet in cashing that crop through the various kinds of stock.

For a number of years we have been feeding silage the whole year. This year, by growing half an acre of field pumpkins, we fed these during October, November, and most of December, letting the silo cool before opening. I wonder if there is any other crop that will give more feed for labor expended in their season than the field pumpkin. The cashing of a varied crop through all the different animals kept on the farm is not very easy; the difficulties increase greatly when reduced to actual practice.

For work horses we have a rule, and I like rules if we do have to vary them, one pound of hay and one pound of grain to each hundred-weight of the live animal. But, with idle horses, carrying over till spring work, the only rule we know of is to keep one eye on the feed, and the other on the horse. Then, growing colts require liberal food, but, in the choice and quantity of those foods, only the skilled feeder can—shall I say—guess at. To three pens of hogs, almost ready to ship, we have fed whole corn at \$35 per ton, scattered on the cement floor; a drink of milk and water, with shorts, at \$27 per ton. (About what proportion of shorts and corn would be most economical, or should we have ground the corn?) Our only stock cattle are heifers growing into cows. We know no best rule for the feeding of these. Feeding fattening cattle, we begin with about two pounds meal, gradually increasing to about eight or ten. We are indebted to Prof. Grisdale, of Ottawa, in the feeding of milk cows: 1 pound grain for every 3½ to 4 pounds milk. This often helps us greatly, as we have cows in all stages of milking. A Jersey cow that has been milking over two months, just tested, gave 15 pounds butter, lacking one-tenth, in seven days, with about 6 pounds meal per day. If we had fed more meal at an earlier period, we would have got more butter. Would we have had less money? Mr. Glendinning is so well informed, and frank and honest, still, is his advice in the Sun, re feeding alfalfa, silage and roots, with do meal, wholly good? Is that a case of penny wise and pound foolish? Would heifers develop into heavy milkers in that way? Would the general trend of his feeding tend to create small producers? Is it not to high development that the dairy breeds owe their great excellence? Our practice is to feed well; if making too much udder, we slacken up a little till they freshen. If well developed, it greatly helps in tiding over the week after freshening. We believe in as liberal feeding as the cow's appetite indicates to be safe. The development of the first few weeks has a great influence

over her season's usefulness. We mix silage with either cut straw or cut hay, moistening and adding a little salt, about equal parts, in bulk, for fattening cattle and milk cows. We have another pile, with about two parts straw in bulk to one of silage. This is fed to stock cattle, idle horses and colts, usually with a few handfuls of meal. We feed a few mangels to all kinds of stock. A little succulent food in winter adds greatly to the thrift of all live animals, down to the hen. To fattening cattle and fresh cows we feed from 30 to 40 pounds. These feeds are so easily grown, all farmers owning stock should hasten to make provision for storing roots and silage. T. B. SCOTT.

Middlesex Co., Ont.

### Dogs and Sheep.

Editor "The Farmer's Advocate":

As I have been reading this valuable paper for some time, I noticed that a great deal of interest has been taken in trying to make away with useless dogs. I am satisfied it would be a great help to farmers, especially those who have some poor, rough land that is not of much use to work. More profit can be made from sheep on these lands than cattle, as sheep eat nearly everything that grows.

Now let me tell you our experience with sheep. We had a fine flock of eight grade ewes. The dogs got in the flock in the day time, and destroyed two sheep and marked a few more. These dogs were half-starved, and very little care was taken in keeping them home. This was a couple of years ago. Since then we have not had any killed, but have had them frightened. Once a dog owned by a neighbor went into the flock, but was seen in time and was sent home, and the neighbor notified. The dog never had enough to eat, or he would have stayed at home. If a dog cannot earn enough to eat at home by helping his masters, he had better be laid aside. A dog that is well kept is never seen very far from his master's home.

A great pest about these parts are dogs following vehicles. They wander along, and if they see a flock they will investigate. Seeing that the sheep will run, they will run also. This often causes trouble. I think that dogs following vehicles should at once be stopped. They are no good, that I can see, to the driver.

Last year our township taxed one dollar on a dog, and there have been fewer dogs roaming about.

Now, about the profit of our sheep; there is nothing to brag of, but I will give you a brief sketch. Last winter we wintered a flock of nine. At fall we had an income of seventy-five dollars, and eight head to winter again. The expenses for our flock are very small, as they do not lamb until April, and so they eat chaff, cornstalks and pea straw, with very little grain, through the winter. Our flock is made up of grade and pure-bred Oxfords.

I believe that early lambs are the most profitable, providing you have a warm pen, and well divided off for each ewe and lambs.

I am very fond of "The Farmer's Advocate," and look for it as I do my meals. I remain a young subscriber. R. FAIRMAN.

Prince Edward Co., Ont.

### Alfalfa and Sheep.

Editor "The Farmer's Advocate":

In my experience of twelve years with sheep, and the wintering of a flock, I have not had any kind of mixture of dry fodder to fill the bill like alfalfa hay and good pea straw, fed half and half, from the beginning of winter till the first of March. From this time till lambing begins, I feed alfalfa twice a day. I do not say but feeding twice in the day all winter would give better returns, but I have some distance to go to the barn where they are kept, and, owing to the scarcity of reliable hired help, I believe that the extra would not be sufficient to pay the expense. This method I have followed for a number of years, and I have had very fair success.

Last year I had forty-four lambs from twenty-seven ewes; two of the forty-four died; one was dead when lambing, the other was lambing out in the yard and got chilled. The flock were fed as I have described to you; and I can safely say that each ewe and her lambs seemed to be in good thriving condition.

The ewes had plenty of milk. This I have found in my experience to be half the battle in raising lambs. I have forty ewes in the flock this winter, and I count on more clear profit, one year with another, on the money invested in the flock of sheep than the same amount of money in any other branch of mixed farming.

There are many other important things about caring for a flock of ewes, but, in conclusion, I am just going to mention three. First, plenty of alfalfa hay; second, a good compact range, preferably; third, a man wide awake to his flock's lambing time. JAMES MACKENZIE.

Bruce County, Ont.

### Cheviot Sheep.

Editor "The Farmer's Advocate":

To the Cheviot sheep the farmers of Scotland owe much. They are an old and thrifty breed, giving a good account of themselves in mutton and wool, whether on the open, unimproved hill ranges or on the cultivated lands of the fertile valleys. About 120 years ago the British Wool Society was formed by Sir John Sinclair (afterwards the first President of the English Board of Agriculture), and other noblemen and gentlemen interested. In their search for a fine-woolled mountain breed of sheep suitable for the hills of the North, they decided on the white-faced breed of the Cheviot Hills as best adapted to their purpose. They seem to have been known as the Long Sheep, to distinguish them from the Black-faced or Short Sheep, and tradition speaks of them as having been found in the borders from time immemorial. To Sir John Sinclair is thought to be due the credit of naming them after their native hills, and his account of the sheep of that time may well stand as a description of the best hill Cheviot of to-day:

"Perhaps there is no part of the whole Island where at first sight a fine-woolled breed of sheep is less to be expected than among the Cheviot Hills. Many parts of the sheep walks consist of nothing but peat bogs and deep morasses. During winter the hills are covered with snow during two or three months, and they have an ample proportion of bad weather during the other seasons of the year, and yet a sheep is to be found that will thrive even on the wildest part of it. Their shape is excellent, and their forequarters, in particular, are distinguished by such justness of proportion as to be equal in height to the hinder ones, which enables them to pass over bogs and snows through which a shorter-legged animal could not penetrate. They have a closer fleece than the Tweeddale or Leicester breeds, which keeps them warmer in cold weather, and prevents either rain or snow from incommoding them. They are excellent snow travellers, and are accustomed to procure their food by scraping the snow off the ground with their feet. They never have any other food but the grass and natural hay of their own fields, except when it is proposed to fatten them. They weigh from twelve to eighteen pounds per quarter, and their meat is fully equal to any that the Highlands can produce."

In the year 1792, Sir John Sinclair moved 500 of these sheep to his native Caithnessshire, where they seem to have realized all expectations. Others speedily followed his example, and soon the Cheviots spread themselves all over both the two Northern counties and the West Highlands of Scotland. Numerous allusions are to be found in the old Statistical Account of Scotland, written by the Parish Minister of that time, to the coming of the long sheep and the going of the Crofter and his Kyles cattle. So entirely favorable has the soil and climate of the two most Northern counties proved to the newcomers that there they have developed a type and characteristics quite distinct from the sheep of the border from which they sprang, and are now known as the Sutherland Cheviot. This distinctive type is a bigger sheep in every way, with a longer body, on longer and stronger legs, and carries a short, thick fleece of the very finest wool. About the time the Cheviots went North, the hill farmers of the Southern Highlands also began to experiment with the white-faced mountain sheep, in order to improve the quality of their wool, which seems to have been in some demand. An intelligent farmer, as he is called, near Moffat, is mentioned as having sold his cross wool at 10s. for six fleeces, and his Blackfaced at 6s. 3d. for 7 fleeces. As a natural result of such object lessons, the white-faced sheep gradually displaced the native black-faced on many of the better hills of the South-west of Scotland, and doubtless the extreme prices ruling for Cheviot wool during the American War, owing to the shortage of cotton, helped along the change. To further satisfy a demand for a long-combing wool, some breeders set themselves to produce a larger sheep, with a long, open fleece. A series of bad winters, however, soon proved the big, open-woolled Cheviot unfitted for the ordinary hill pastures, and that the two Scottish mountain breeds have properties peculiar to each, and difficult to understand and explain. The Blackfaced have now regained their place on the higher rough hills, and the Cheviots retain their place on the lower green hills.

The Cheviot sheep of the present day, being largely in the hands of tenant-farmers, have been bred entirely on lines of general usefulness; that is, ability to pay rent—and the aim has been to maintain and perpetuate the good points of a breed combining hardihood and utility, with a beauty of appearance worthy of a long ancestry. In the border counties a shepherd takes full charge of two to four sheep, and the run of two or three acres of pasture has been found by experience sufficient for the keep of a ewe and her lamb, with a store of natural hay in the winter, when