

meal in a box, letting them stand and soak for one day, and then feed. With a ration of turnips and meal, a warm house and careful management, pigs can be fed almost as cheaply during winter as summer.

(7) After weaning and again breeding we in winter keep our breeding sows in the barnyard, and feed them liberally on turnips (pulped), mixed with a little grain (crushed), our aim being not to fatten them, but to have them in good, vigorous health by the time they farrow. Our sows bring two litters per year, preferably in March and September. We aim to turn our pigs off at between six and seven months old, and to have them weigh between 180 and 210 lbs., live weight.

ANDREW ELLIOTT.

Galt, Ont.

### RAISING HEIFER CALVES.

Editor of FARMING:

SIR,—Our system of feeding and otherwise treating heifer calves intended for use in our dairy herd from the time they are dropped until they in turn become mothers is as follows: We have the cow drop her calf in a loose box if convenient and comfortable; but if the box stall is cold, or colder than her own stable, we have her calve, tied in her stall. We allow her to lick the calf and leave it with her until it is able to suck, after which we remove it from her altogether.

We usually give the calf the dam's milk for a few days at least, and only a small feed at each time, three times a day until the dam's udder is natural, then only twice a day. Care is taken not to over-feed, as we consider more calves are injured by over-feeding than by spare feeding. We feed whole milk for a month, or until we see the calf can be safely put on skim-milk.

In winter, when we have the skim-milk from the creamery, we then begin to mix skim-milk with the whole milk, gradually adding more until it gets all skim-milk. We always warm the milk to natural heat. It depends on the calf how soon it may be put on skim-milk. A strong, vigorous, and good drinker can be started sooner than a delicate one.

In summer, when the milk goes to the cheese factory and we have no skim milk, we begin to add water instead of skim-milk. We keep an older calf with the younger ones in a box stall to teach them to lick meal, and just as soon as they will eat it we feed them a mixture of bran and chopped grain, immediately after they drink up their milk. Hay is placed in a separate manger for them. As soon as it is safe to feed them ensilage without scouring we do so, with their grain ration on it.

We are careful in weaning them from milk altogether, and take great care to see that they do not lose ground in doing so. We strive to grow them as fast as we can without fattening them, and at the same time to do so as cheaply as possible. If calves come in the fall or early winter we turn them out in the spring as soon as the weather is warm and there is good grass. Late spring calves we keep in the stables till after the fall fairs. We have the heifers served to calve at two years old, and we feed them well all the time, never allowing them to stand still or go

back. Unless they are on good pasture we feed almost heavy for some time before calving. We aim to develop a heifer's udder to its utmost and have her in good flesh when she drops her first calf, but do not forget that a heifer with her first calf, though not liable to milk fever, may have it. On the development of a heifer's udder at first depends largely her capacity for future usefulness.

The most common errors in raising calves are, I think, want of feed, and especially care, for the first six months of their lives—as a consequence, the animals are so small that they have to run until they are three years old before dropping their first calf; too much feed, sometimes allowing them to suck, or feeding too much whole milk.

We raise our bull calves much the same as the heifers, only they can carry a trifle more flesh without injury. I am, yours truly,

Burnbrae, Ont. ALEX. HUME.

### RAISING DAIRY STOCK.

Editor of FARMING:

SIR,—After the calf is dropped we place it with the cow in a box stall, where it remains for three days, or until all danger of milk fever is past. This includes the heifer, which the calf is never allowed to suck. The calf should have the first milk that is drawn from its mother. It is then fed sparingly on the new milk for from six to eight weeks. We then commence to withhold part of the whole milk and replace it with skim-milk, gradually increasing the skim-milk until the calf is fed wholly on it. The skim-milk is continued for five or six months.

In the meantime the calves have been taught to eat a little oat chop. This we bring about by placing them with one that has already learned to take the chop, and which is not too much older than themselves. You would be surprised how soon they will begin to nibble it. At the same time some fine hay and a few finely-cut roots are placed before them. When weaned, we keep them growing right along, giving them lots of bulky pulpy food to spring them out. Never on any consideration allow them to get fat; it is in the dairyman's own hands whether he makes or spoils his cow. If you lay the nucleus for beef you will have beef, but if you lay the nucleus for milk you will have milk, provided you have been breeding for that before. Getting fat on pasture alone won't hurt them. We keep them growing right along, and have them come in as nearly as possible after two and a half years old, not much sooner, and not much longer. We spring them out as much as possible before their first calf, as we consider that the first two years is the making or breaking of a cow, that is, you are going to make a cow of her in that time or *spoil* her.

Some of the most common errors in raising calves are: Letting the calf suck the cow for a lengthened period, giving it too much new milk, in fact you should not give it fattening food of any description; starving it to death, feeding it whey and slops; letting it run out in the fields exposed to the hot sun, to flies, and to rub its nose on a stubble field, and to drink water,

if there is any, out of a mud puddle; letting them run in the field until the snow flies, then driving them in and feeding them on straw. Then because they are small when they come in you let them go dry to give them a chance, and then you have fixed it. Fixed it, how? Fixed it so that there is nothing in them, and nothing in your pocket-book either.

We raise our bull calves almost precisely the same as the heifers, and, when for use in the herd, they serve only a limited number of cows the first season, and never any until they are one year old.

Our cows, coming in in October, are housed and fed liberally on all kinds of nutritious food for the production of milk. We feed them at all times what they will assimilate, and we feed largely of ensilage, hay, roots, grain, bran, and oil meal. We aim to keep up a continual flow of milk. They are always kindly treated, and supplied with abundance of water, which is supplied by a windmill, and received in pans in the stable. We are, yours truly,

WM. STEWART & SON.

Menie, Ont.

### MUSTARD FOR SHEEP.

Editor of FARMING:

SIR,—Your editorial on mustard in the issue of November 9th, would lead one to believe it was wild mustard, when it was nothing of the kind. There is as much difference in wild mustard and table mustard as there is between a red dock and rhubarb. In England they sow table or yellow mustard as a catch crop. The seed is three times as large as wild mustard, and yellow, and there is no danger of it staying in the land. In England they sow it on stiff clay, and plough it in, when it will act the same as lime does on stiff clay. Any person sowing rape for lambs should have a piece of land in mustard. It will keep lambs from bloating as they do sometimes on rape. A few years ago, when Professor Shaw kept so many lambs on the Model Farm, I advised him to sow half an acre of it in every field that he had rape in. The first I sowed for pasture was in 1864. I sowed five acres on fall wheat stubble. I cultivated it good, sowed and harrowed it. One team did all the work in a day and a half, and I had a splendid crop. It was sown on August 21st, and was fed off as soon as in blossom. The cows and sheep had pasture as well as mustard, but my cows gave one-third more milk while on mustard, and the butter was excellent. I have seen lots of table mustard sown in England forty and fifty years ago to kill wild mustard. It grows rank and checks the wild mustard, and when coming in blossom it is fed off, and that kills the wild variety. When I was in Prince Edward County last winter, I saw something they call her-ric, but I could not see any difference in it from wild mustard. Of course it was dry, but the seed was the same I thought.

Yours truly,

ALBIN RAWLINGS.

Forest, Lambton Co., Ont.

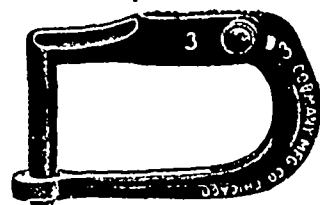
[In the editorial referred to we explained that the mustard mentioned was probably white mustard, and not the same as our wild variety.—EDITOR.]

## PREMIUMS for New Subscribers

Commence canvassing to-day, and secure some of these useful and handsome premiums

### LOCK PIN CLEVIS

The most complete instrument made.



A full set given for one new yearly subscriber at \$1.00

### THE ANTI-RATTLER COUPLING

Prevents rattling or sound.

Given for one new yearly subscriber at \$1.00

### SHEEP

Sixteen labels with number and name complete



### LABELS

Given for one new yearly subscriber at \$1.00

### MILKING TUBES.

Most useful instrument made.

Given for one new yearly subscriber at \$1.00

## HANDSOME HOLIDAY GIFTS

Gold Cuff Pin, valued at \$1.15.  
For two new yearly subscribers.

Gold Baby Pin, valued at \$1.25.  
For two new yearly subscribers.

10 Karat Gold Band Ring, valued at \$1.50  
For two new yearly subscribers

Nickel Open Face Boy's Watch, valued at \$3.50.  
For five new yearly subscribers.

Solid Silver Watch Chain, several styles, valued at \$2.25.  
For three new yearly subscribers.

Gold Plated Watch Chain, several styles, valued at \$2.75.  
For four new yearly subscribers.

Ladies' Rolled Gold Plate Guard, valued at \$4.50.  
For seven new yearly subscribers.

Sterling Silver Napkin Ring, Valued at \$1.25  
For two new yearly subscribers.

Sterling Silver Napkin Ring, valued at \$3.50.  
For six new yearly subscribers.

For agent's outfit, address

## FARMING

20 Bay Street, Toronto, Can.

Write for sample copies.