

in England are at the heads of milking Shorthorn herds and they have nothing whatever to recommend them except pedigree. Their calves are further evidence of this fact. It is only a few years, if care is not exercised until Canadian Shorthorns will be in a much worse position, for there is not the number of big, robust, strong-constituted cows in this country to work on. Canadian Shorthorns, dual-purpose or beef type, must not be spoiled. The so-called Scotch type with plenty of substance often produces fair milkers. English Shorthorns are recognized as good milkers. Beef must not be entirely sacrificed or the breeder's greatest asset is gone. Milk must not be ignored or much of the utility of the breed is lost. Utility has demanded more milk. If this half is carried beyond reason utility will demand more beef. The danger point is not far off, yea, is it already reached? The dual-purpose cow is a reality. Neither meat nor milk must by its over-development be allowed to drive her into oblivion. The matter is in the hands of the breeders. There is such a thing as too much milk. The prize is doubtful; the danger is certain. The goal is difficult, but this is no reason why it should not be successfully reached.

The Feeder Lamb From Birth to Block.

By R. H. Harding.

In discussing the feeder lamb from birth to block, from the viewpoint of showing it to be profitable, it seems to me to be important that the foundation of the flock should first be dealt with, as I believe therein do many fail because they neglect to lay good enough foundation. I will divide my subject into three parts, viz., Selection, Feed, Care.

SELECTION.

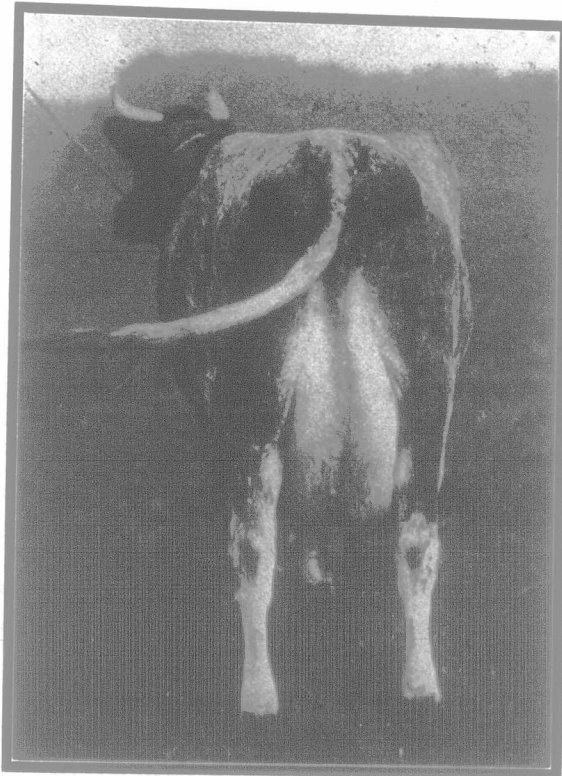
While good judgment must be exercised in each of these, if the best possible judgment is exercised in selecting the foundation it will not require nearly the energy to put the lambs on the market in good condition. In other words, if the foundation be of poor type, long-legged, long-necked, flat-ribbed, etc., all the good judgment conceivable will not enable a man to finish a first-class article from such. In order to get the lamb that will develop in proportion so as to finish practically a perfect carcass, or as near to it as is attainable, and thereby capture the very highest price in the market, requires more skill and better judgment than very many sheepmen are putting into this branch of their business. (I make no reference to breeders of pure-breeds, excepting when I refer later to the class of a ram the farmer should use). Many men imagine that, while they are breeding only grades for slaughter, anything will do. This is just as great a mistake in producing lambs as it is with producing steers, and I need not refer to the difference between the good kind of steers and the poor kind; anyone can see it.

No matter what the choice may be as to the grade or cross, the ewes should be of a mutton conformation. Perhaps a word of explanation describing what I mean might be of some benefit to someone. The kind of head that indicates a good feeder is thick, rather than long, broad between the eyes, broad poll on a short, thick neck, blending full into the shoulders; shoulders even and full with the side, top-line, straight, well filled in behind the shoulders; ribs, well-sprung hind quarters full and deep; broad, deep chest to insure plenty of heart and lung room; wool dense to protect from storm; and plenty of bone of good quality, which will be indicated by the sheep standing right up on its toes, as it were, rather than being broken down on its pasterns as many are. Some may say—"what have these points to do with the feeder lamb?" In answer to such I am sure that lambs from ewes possessing these qualities, if they are sired by a ram of equal quality, will give their owner substantial returns. Having outlined what we want in the ewe flock it is equally important that we select a first-class pure-bred ram, first-class from a mutton viewpoint. It is not so very necessary that the fancy points, such as wool on the face, etc., be perfect, but it is important that the form be right, don't let anyone persuade you that a good grade is just as good as the pure-bred. I would rather use the poor pure-bred, because he is bred along a straight line, than use a good grade, because his lines of breeding are so varied that you do not know what you are likely to get. Now having selected a ram, stick to that breed; avoid inbreeding; select a few of the best and most uniform ewe lambs to take the place of the older ewes that should be discarded. You will thereby improve your flock from year to year, so that it will

soon resemble the purest flock in the community. I would certainly advise anyone keeping a grade flock to be satisfied with nothing but the best. The best are the cheapest in the end.

FEEDS.

In order to have the flock produce the greatest profits possible it is necessary to grow certain feeds that will under average conditions give the best results, and one thing worthy of note is the fact that the best feeds for sheep are also great soil builders, viz., red clover and alfalfa, the best of all feeds. Pea or bean straw, well-cured, also makes excellent sheep feed. Oats, peas and tares



An Udder Built for Business.

mixed, sown fairly thick and cured green also make desirable winter feed. For fall feed there is nothing better than rape for both sheep and lambs, but it is preferred to have a run of grass pasture in connection, as this counteracts the heating effects of rape, which, if fed alone, sometimes causes trouble. White turnips, cabbage, and kale are also excellent fall feed for the flock. Swede turnips should be provided for winter feed. Mangels or sugar beets are also splendid for young lambs or nursing ewes, but are not desirable food for the in-lamb ewe, as they tend to develop large, flabby, weak lambs. They are not safe feed for rams.

CARE.

Under this head there are several things to be considered. As we have already recommended the

they can be destroyed so easily. A cool, dry, well-lighted and well-ventilated shed, with large doors (to remove the danger of crowding and consequent injury) preferably opening to the south into a large exercising yard, where colts and horned cattle cannot molest the flock is preferable to a close, warm, building, (fairly warm pens are necessary for lambing in). Considerable loss is often incurred by the flock from kicks and hooking where the sheep run with other stock. They should now be liberally fed with such foods as have already been recommended, but care should be taken not to feed too heavily on roots. I think two pounds per head per day can be fed with safety and profit, and more may be fed if the sheep are getting the exercise that is necessary. If the necessary exercise cannot be secured in any other way a portable rack at the opposite side of the yard, in which to give them their mid-day meal, solves the problem pretty well. With a constant supply of fresh water, salt and sulphur, the ewes should reach lambing time in good flesh without grain. However, if any are seen to be failing in flesh, due, perhaps, to the heavy drain on the system supporting two or perhaps three lambs, a small grain ration in time will often prevent serious trouble later on; two very common causes of failure with lambs are caused by ewes thin in flesh having very little or no milk, and thereby stinting their lambs or perhaps starving them outright, and ewes being overfed with grain whose milk is so strong that it causes constipation or white scours, either of which will set the lambs back several days or perhaps weeks.

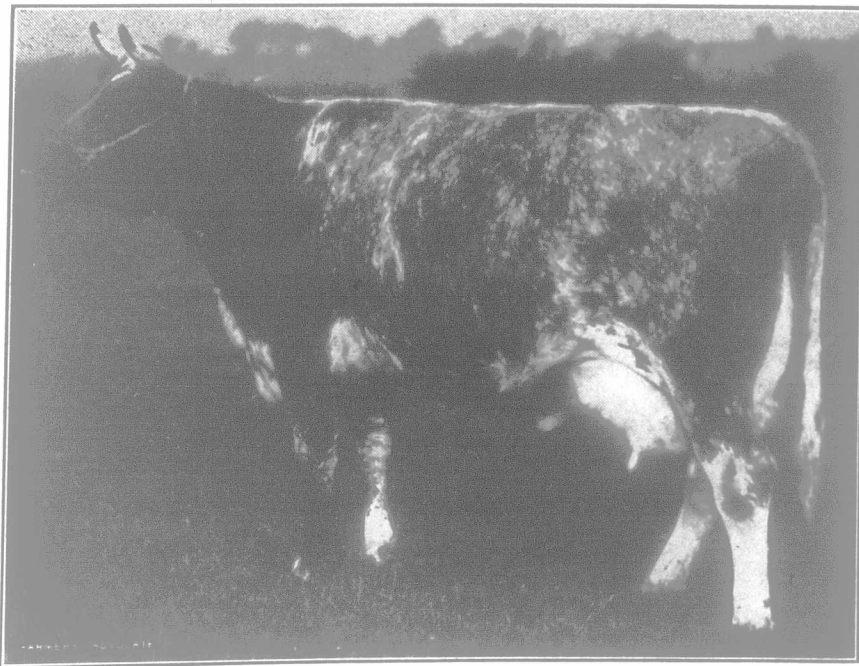
Lambs that have received a normal start should make daily gains of one-half pound or more until ready for the block. A lamb should at no time be at a standstill. To accomplish this success, if the flock is yet in winter quarters, the ewes should be liberally fed. To their regular ration should be added a light feed of oats and bran, and all the roots they will clean up. In addition, a creep should be supplied into which the lambs can go unmolested and where they will soon learn to eat oats, bran, oil cake and pulped roots. They will usually start to eat at about 10 days old, and it is of great benefit to both ewe and lamb.

All lambs should be docked when about a week old. What is more unsightly than a bunch of un-docked lambs going to market in the fall finished on a field of rape or clover and manure to the heels? All male lambs should be castrated while young. My plan is to do it at about three weeks of age, by cutting off the end of the scrotum and drawing the cord out without cutting it off. Some advise cutting off the whole sack close to the body. In this case I would advise doing it at three to seven days, in either case an antiseptic should be applied, and clean bedding provided to offset the danger of blood poisoning. It is important that the knife or pinchers used in the operation should be thoroughly clean.

One more simple operation is necessary before the lambs are turned away to pasture—they should be dipped. While the ewes are shorn (unwashed) as they should be before they are turned out and the lambs are thoroughly dipped about a week afterward, practically every tick will be destroyed, as they have gathered upon the lambs for protection. If small lice are in the flock, all should be dipped.

Lambs from this on should get no setback if sufficient latitude is given them. Pasture should be so arranged that the flock can be changed from one field to another every two or three weeks. They will do better, and less acreage will be required. There should be a field of second-crop clover, or a good substitute set apart for the lambs at weaning time (early in August). A very good substitute is rape sown in the corn field just ahead of the last cultivation. In average years this plan provides considerable feed and the lambs will also look after any weeds that may have escaped the cultivator. Lambs should have abundance of green feed, rape, clover, etc., from now until they are to be marketed, and they will stand shipping all the better if a small allowance of oats and oilcake is added to their rations.

I think the custom of marketing only partially-finished lambs during the fall should be discouraged, and all thin lambs kept until mid-winter or early spring and finished, thereby doing a three-fold good, first, feeding the farm; second, supplying an article of food that will surely raise the standard of home-grown lamb and thereby develop trade, and third, by putting into the pocket of farmers the price that only the choice article will command.



The Right Kind of Dual-purpose Shorthorn.

use of a first-class, pure-bred ram, we will assume that the flock is bred at the usual time, viz., October or November; (although there is another class of lamb-raising that is especially profitable, I refer to the raising of winter or what is commonly called hot-house lambs, but as this is a class somewhat out of the ordinary I will not discuss it). It is necessary that the in-lamb ewe be well nourished through the winter. She should be dipped before cold weather sets in, in order to destroy ticks, lice, etc. There is altogether too much loss incurred by keeping such vermin when