

profitable method of raising steers. When calves cannot be allowed to suck their dams very good growth can be got from skim milk after they have reached the age to feed well. He described the method of a man who raises good calves without milk after they are five weeks old. They get whole milk for five weeks, and then gradually fed gruel made of oil meal. The change from all milk to all gruel takes about two weeks. Prof. Day recommends boiled flaxseed rather than oil meal to be fed with skim milk, because the oil of the seed takes the place of the removed cream. He warned the audience against making too radical changes in feeding. He would commence with one tablespoon of flaxseed at a time, and increase it to half a pound in two weeks. It should be well boiled. The calves are taught to eat as early as possible. The evils of over-feeding were dwelt upon. It was pointed out that under-feeding was less dangerous to the health of the calves. Ten pounds of milk per day up to five weeks old was said to be the maximum for safety. It may then be increased to 15 pounds or 18 pounds during the next two weeks. Twenty-four pounds of milk was said to be the most that any calf should receive in one day. As supplemental food, oats and oil cake is a good mixture. Prof. Day prefers ground corn and oats for calves getting skim milk. The too common practice of under-feeding calves the first winter after weaning was strongly condemned as unprofitable. Their growth should be continuous.

Speaking of the cost of gain at different ages, the average of a large number of feeding trials conducted at experiment stations was given as follows: From 1 to 12 months ranged from \$1.87 to \$4.20 per cwt.; from 12 to 24 months, \$6.13 to \$8.12 per cwt.; from 24 to 36 months, \$9.59 to \$12.54 per cwt. He argued from this that the earlier a bullock is finished and turned off the more profitable is the transaction. As a rule, steers should go at 24 months old. At that age a finished steer may be held a few weeks without loss, while an older steer costs more to hold for a higher market. Again, the buyers are looking for the younger ones.

On being asked whether it pays to feed grain on grass, Prof. Day considered it unprofitable to do so when the pasture is good. He told an enquirer that calves should be housed in a cool, roomy, clean building, such as a sheep house in summer. To keep them in a close, dirty box stall is bad practice, from the standpoint of the animals' future. Milk, he stated, should be always fed at blood temperature. To prevent calves sucking each other, Prof. Day recommended stanchions, which can be closed while they are taking their milk. After the milk a little meal should be fed before the calves are liberated, thus no sucking will be indulged in.

#### THE DUAL-PURPOSE COW.

Mr. J. G. Clark, of Ottawa, the well-known breeder of Ayrshire cattle, addressed the gathering on the possibilities of building up and maintaining a dual-purpose herd. He took the ground that it could be done, but the man who undertakes it must be satisfied with less profit than either the special-purpose dairy farmer or beef-raiser. The speaker said that up to 1887 he owned Shorthorns and their grades, and quit them because quite half of them were such poor milkers that the other half had to keep them. He claimed to have done his best to use sires from milking families, but he could not get his herd up to a profitable state of production. Every farmer should seek to get the best milkers he can, but unless dairying is to be the chief business the beef form should be striven for. To try to get much of both is to get neither in a paying quantity. In his opinion the farmer who endeavors to produce the strictly dairy cow will get larger returns, proportionately, than he who tries to get both dairy and beef. Conditions vary so much, however, that every man must settle the matter for himself. The dual-purpose cow is a necessity in producing beef profitably, and can be developed sufficiently to aid materially in keeping the balance on the right side, where beef production is the mainstay of the farm, without injury to the quality of the beef animal. On the farm, situated in a district where the product of the dairy can be conveniently marketed, it will pay better to use a good dairy-bred bull and leave beef entirely out of the question. If we concede that the dual-purpose cow is a possibility for the dairy farmer, Mr. Clark asked how can we get her? Are we safe in looking to the so-called milking Shorthorn for sires? The speaker instanced the case of twelve cheese-factory patrons, who sent in their reports for prizes in the Western Ontario Dairymen's Association competition. These ranged in their average returns from \$62.50 to \$40.61, and the lowest were grade Shorthorns.

In the dairy-test competition there has been a prize of \$200.00 held up for years to be won by a Shorthorn cow that can score the highest points in the show. Although there are more Shorthorns registered in Ontario than all other breeds combined, that prize has yet to be won. At Guelph, in spite of all that has been said about milking Shorthorns, there was only one cow that scored high enough to win a prize at the show of 1906. Here at our own dairy, surely none of them reached the standard required for a prize. Another case in point was cited: A good cow well known to many bought a Shorthorn cow that figured high in a dairy test. He was so well pleased with her that he bought two others of the same breed, expecting they would also be good milkers. He was very much disappointed. He said that it is well

develop milk production in the beefing breeds, but always keeping beef production as their proper sphere of profit. The dual-purpose cow has a place on beef-producer's farm. The man who wants to keep his sons satisfied milking cows to-day, must keep cows that will make it worth their while, concluded the speaker. In reply to Mr. Clark's expressions of lack of confidence in the milking Shorthorn, Mr. Robert Miller stated that fully 90 per cent. of the milk supply of the City of London is produced by Shorthorn cows. This, he stated, is done by farmers who must secure the greatest possible profits from their farming operations in order to live. Mr. Clark wanted to know why none of the bulls from these cows were ever imported, and he was told that such a bull would bring about \$100 in Canada, while the thick, Scottish kind bring \$500 per head.

Mr. Robert Miller closed the session by a lecture on judging beef cattle, demonstrated by the champion steer. Replying to a question as to how this steer was reared, his owner, Mr. James Leask, of Greenbank, said that he had suckled his dam for nine months, and he had about all the chopped grain (chiefly oats), pulped roots and clover hay he could eat during the winters, and grain and green feed in summer during his two years of age. He had never been allowed to graze.

#### BEEF, WITH ALL THE MILK WE CAN GET.

Editor "The Farmer's Advocate":

Mr. Good, in your issue of the 7th inst., requests that I should define my views a little more explicitly as touching two or three questions which he raises. No one will mistake my meaning in taking the position that greater attention should be paid by the breeders of Shorthorns in Ontario to the milking capabilities of their cattle. Few will care to criticise that position. The best breeders advocate it. But Mr. Good will agree with me that that is scarce the same as saying that we should seek to develop a dual-purpose strain within the Shorthorn breed. The mutton sheep grows wool, but the attempt to improve, in some degree, the quality of that wool would not be misunderstood to mean that the purpose of that attempt had been to create a "dual-purpose" breed of sheep. Mutton sheep are still mutton sheep, even though they grow wool. Beef cows are still beef cows, even though they give milk. I think my article suggests my reasons for believing that the adoption of the dual-purpose standard would be an unwise and unprofitable policy, and these suggestions need not be repeated now.

Will not the above remarks answer Mr. Good's other question about the nomenclature of the cow that will suckle three calves in the season? The breeding and the purpose in selection will have something to do with the classification of such a cow, and breeders of beef stock do not consider it a lack of merit in their cattle in the evidence of their capacity to give milk. Further, it has been with the idea of economizing in labor and in expense that the above method of raising calves has been followed. The milking of cows, the separation of cream, the making of butter and the feeding of the calves involves an expenditure of time, and, therefore, money, and it is still my belief that when the farmer desires to make money out of the dairy business he will be wiser to breed and milk dairy cattle, cater to a special dairy market, and do it in a co-operative way. Mr. Good further asks where calves can be obtained to put on such a cow. Sometimes they can be bought to advantage. Again, the farmer on a hundred acres can only keep a limited number of cattle. Making allowance for calves and young stock, he will, therefore, only be able to keep a limited number of cows. He will need to milk two or three of these to obtain milk for his own household. It can usually be arranged that, among a number, some will come in at about the same time, and the possibility of doubling up in any case frees the farmer from the necessity of milking one cow for the season, since a calf can usually be obtained to milk the cow for the second five months. This has been a common practice on many farms.

We all recognize that this is a controversial question. We can scarcely all expect to agree upon it, and I must thank Mr. Good for the courtesy of his request. It has been my desire to take a reasonable view in the discussion, and I trust that it may be so understood.

H. S. ARKELL.

#### FOR HOME-BRED CATTLE, HORSES, AND BOYS.

Editor "The Farmer's Advocate":

How is it that imported stock is thought so much better than we can raise in Canada? Some claim that we get fresh blood, but I would like to know where they get the fresh blood in Britain. Have not some of their best breeders bred a great deal closer than the breeders in Canada?

We have the feed and the stables, and the men to feed stock. If we had the market they have, I don't see why we should need to take a back seat.

We have been getting a lot of boys imported here these last few years, and if we get fresh blood I think it is a very poor quality. I would rather have one Canadian boy than half a dozen imported ones, and I think most of the cattle and horses that are imported are not the best either.

A SUBSCRIBER.

#### MORE ABOUT SHEEP AND DOGS.

Editor "The Farmer's Advocate":

Possibly some of your readers are thinking I am dead and buried, or else so much ashamed of my article in your issue of January 17th, page 94, that I have run away to parts unknown. To any who may be entertaining such notions, I would say I am still living on the farm on which I was born, and in the enjoyment of fairly good health, notwithstanding somewhat severe criticism by some writers. I have just been saving my powder till the other fellows had burnt theirs, and now, if you will be kind enough to grant me space in your valuable paper, I will reply to some or perhaps all who chose to criticise me so severely, and I suppose the better way is to take them in the order in which they appear. The first I noticed is on page 202 in your issue of Feb. 7th, over the signature of R. L. Holdsworth. He states that I complain of the injustice of taxing dogs and using the money to reimburse owners of sheep for their losses by dogs. Now, anyone, by referring to my article of January 17th, can see that I am not complaining of taxing dogs. I advocate taxing dogs. I am only complaining of the unfairness of using said taxes as a fund to pay for sheep destroyed by dogs because that, in providing the fund from the dog tax, the man having no sheep at all pays as much into the fund as the man who might have a hundred. In reading his article still further, I notice that he makes the statement that I suggested that the tax remain at \$1.00. He must have completely lost control of his pen, for if he and the rest of your readers will refer to my article, they will find that the word "remain" does not occur in the whole article. What I said was that my plan would be to tax one dog \$1.00, and double for every extra dog, etc. The reason I said \$1.00 is because that is all the statutes will allow, as they are at present; but I have no objection to the tax on dogs being raised, because each municipality requires a certain amount of money, and if they get a goodly sum from dog tax, our taxes on other things will be lighter, provided the dog tax goes into the general fund. It would appear that Mr. Holdsworth must be very much afraid of dogs while travelling on the highways. I am not a very young boy now, and I have travelled on the highways by day and by night, and I have never experienced any inconvenience worth mentioning from dogs, neither while walking nor driving. If a dog comes out when I am passing, I do not take my whip and apply it to my horse and try to outrun the dog, but slow my horse to a walk and talk to the dog in a pretty emphatic way—I do not mean that I swear at him, as that is as useless in the case of dogs as anything else—and give him to understand that it would be better for him to go home and mind his own business and that I would mind mine, and invariably the dog walked off as if ashamed of himself. I tell you, Mr. Editor, I find less difficulty in teaching the most of dogs what is right for them to do than to teach some men what is right for them to do.

The next writer, Mr. Misner, on page 203, thinks I did not go far enough. I hope this will please him in that respect. His ideas about some things are fairly good, but I am afraid he will have a good deal of trouble to put them into practice.

The next I will notice is an article by Mr. "Keep Off Your Dog." He thinks I give funny reasons for owners of sheep to insure their sheep against loss. Examine all the articles carefully, and you cannot fail to see that it is insurance on their sheep against loss that they are all wanting, and, Mr. Editor, is it not the owner of the goods or property to be insured that always insures and pays for insuring? We very frequently hear the statement that because dogs kill sheep all dogs should be taxed to provide a fund for the payment of sheep worried by dogs. Just at first sight, this statement may seem all right, but on closer examination it is not hard to see that it is all wrong. There are but a very small per cent. of dogs that kill sheep, and when they are discovered, it is right that they should be destroyed, and that the owner of such dog or dogs should pay all damage done, but it does not at all follow that the owners of dogs which are doing no harm should be expected to furnish a fund to pay the loss done by others, and we must judge all dogs innocent until they are proved guilty. Let us compare parallel cases. Fire is a destructive agent, and causes great loss. Would anyone who is not insane argue that because fire causes great loss, everyone owning or using fire should pay a fixed sum into a fund to reimburse parties coming to loss through fire? Is it not the parties who want their goods insured that pay for insuring, and pay for such insurance in proportion to the value of the property insured? Some men steal, and cause great loss to their brethren by their unlawful conduct. Who, I ask, but an inmate of an insane asylum, or one who ought to be an inmate would think of arguing that because men steal, all men, old or young, high or low, rich or poor, sick or well, honest or dishonest, should be taxed (and that to the same amount) to reim-