the Live-stock Journal (Eng.) for November 15th, 1907, the record of that herd of reds, whites and roans is given, viz.: Forty-six cows averaged 6,787 pounds of milk for the year, as also of the following cows: "Darlington Cranford," average for seven years, 9,665 pounds; "Decentia 24th," average for five years, 7,852 pounds; "Moppy Gem 5th," average for seven years, 7,738 pounds; and "Red Rose," average for five years, 7,720 pounds. Further, if one will take the trouble to refer to advertisements of Old Country breeders, more particularly the Southern men, for the past five years, he will note the increasing number each year of those keeping milk records of their cows. These southern cattle one would expect to be freer of tuberculosis than the Scotch cattle, owing to the conditions under which they are kept, viz., more in the open air. This assumption is backed up by the comparative (when compared with Aberdeen-Angus and Shorthorns, Scotch herds into which Scotch cattle have been introduced) freedom from tuberculosis of the Hereford cattle.

One of Canada's leading Shorthorn breeders, Hon. John Dryden, when in conversation recently with a man interested in Shorthorns, stated that if a younger man, and about to start in the breeding of Shorthorns, he would give considerable attention to the development of the milking

trait in the breed.

Let us come closer home. At the Central Experimental Farm, a pure-bred Shorthorn cow gave over 10,000 pounds in her second lactation period, and promises to beat it in her third. Her bull calf is a very passable one, and quite equal to ninety per cent. of those turned out from herds whose cows make no pretensions to milking.

We have, further, the records of cows, purebred Shorthorns, at the Iowa and other Experiment Stations, and the leading cow at the Wisconsin Experiment Station, with a yearly record of over 500 pounds butter, was a grade (15-16) Apropos of this cow, it is worth noting that her record upset the equanimity of the dairy-type men, whose habitat is Wisconsin. One hied him to the original owner to trace the ancestry of this remarkable cow, in order that it might be proved that she had an ancestress or ancestor not a Shorthorn, to whom the credit might be allotted. Further, as illustrating how deceptive type may be, two of these ultra-dairytype men were allowed to select and buy their ideal of the milking type, to become the Station They did so, and it is only fair to property. add that these two animals bore the names of their respective sponsors; and, while one did pretty well, the other fell to the bottom of the herd in vield.

Referring further to some records of grade Shorthorn cows of the dual-purpose character, I would call attention to the 16th annual report of the Wisconsin Experiment Station, in which will be found short histories of three cows. quote from that report, using the words of Prof. Carlyle, who is noted as one of the best judges of dairy cows on the American continent, and who.is, by early training and inclination, a

special-purpose advocate:

'A glance at the yearly records of the cows, as given in the table, shows that Rose, a grade is easily the greatest pr the herd, and returns the greatest profit over cost of feed eaten for the year, though she was milked only 326 days out of the 365. casual observer of the herd would never select this cow as being a great milk and butter producer, as she is of the Shorthorn type, and inclined to be beefy, yet she was the first cow purchased for the herd when they were selected. This is mentioned as illustrating the fact that a dairy cow must be very carefully and closely examined, if her dairy qualities are to be discovered by an examination. It must be admitted that the results of this year's work were a great surprise, for, while it was thought that the large and strong Shorthorn grades, representing the dualpurpose type, would return a fair profit on the feed consumed, it was not even surmised that they would equal their much more finely-organized and smaller sisters, the Jersey and Guernsey grades, in cheapness of butter production.

This yearly record is given as a preliminary work, and is not to be considered as at all conclusive; and yet, when five such Shorthorn grade cows as are here reported can be picked up in a single day, as was the case with these, it would seem as if that class of cows must have a

great deal of dairy value.

"Rose.-A grade Shorthorn cow, whose sires for four generations have been pure-bred Shorthorn bulls. A photograph of this cow indicates remarkable refinement of the head and neck, otherwise there is nothing particularly noteworthy about her general appearance, judging her from the standpoint of a dairy cow. Her udder is quite deficient in some respects, but she has a well-developed system of veins and milk 'wells.' She had been nursing three calves for over five months at the time of purchase, which is certainly not a very favorable preparation for the making of a large yearly record of milk and butter production. In 326 days' milking period out of the ever we find nurse cows needed to supply the calf

year, she produced 10,163 pounds of milk, containing 433.82 pounds of butter-fat, the equivalent of 506.12 pounds of butter. The average amount of fat in her milk for the year was 4.2 per cent. The total feed consumed during the entire year cost \$35.06. The total value of the butter and skim milk, when valued at prices given on a preceding page, was \$114.92, leaving a profit over cost of feed of \$79.86. Her butter, produced at a cost of 6.9 cents, is cheaper than any cow in the herd.

"Duchess.-A grade Shorthorn cow, weighing when in fair flesh, over 1,550 pounds. Unfortunately, her former owner and breeder had no record of her ancestral breeding, beyond the fact that she was got by a pure-bred Shorthorn bull, out of a grade Shorthorn cow. This cow approaches very nearly an ideal dual-purpose type. She has great size and scale, takes on flesh rapidly and evenly when dry, and loses it still more rapidly when she freshens. She is a very persistent milker, it being necessary to limit her feed when drying her off, within six weeks of She gave, during the year, 9,627.9 pounds of milk, containing 376.97 pounds of butter-fat, the equivalent of 439.83 pounds of butter. The average test for butter-fat for the year was This cow ate, during the year, 4.4 per cent. \$33.93 worth of feed, and her products were valued at \$101.00, leaving a profit of \$67.07. The average cost of each pound of butter produced during the year was 7.7 cents.

"Maud.-A grade Shorthorn cow, whose sires for three generations were pure-bred Shorthorn She is very long in body, but lacks considerably in depth. Her udder, when filled, is of almost perfect form, and the milk-vein development very good. This cow had been milking four and one-half months when purchased, and This cow had been milking she was not due to calve until some time after her yearly record closed, which was not very favorable for a great milk and butter yield. milk production for the year was 7,789.3 pounds of milk, with a butter-fat content of 322.59 pounds, equivalent to 376.35 pounds of butter. The average amount of butter-fat in her milk was Her butter was made at an aver-4.2 per cent. age cost of 8.3 cents per pound, the products being worth \$85.78, the cost of feed being \$31.35, leaving a profit of \$54.43."

Of the cow "Rose" it may be said that she produced a steer which, shown as a two-year-old at Chicago International, took a very high standing in the grade Shorthorn steer class. In fact, if I remember rightly, he was placed first. fortunately, this cow died of milk fever, further opportunities of completing the third year's rec-

ords being thus unavailable.

I am reliably informed that the results of these tests proved so disappointing to the specialpurpose advocates, some of whom, by the way, had considerable political and other influence in the State of Wisconsin. that the test of the dualpurpose cows were discontinued.

Not much more than a year ago I was at a farmhouse, and, while conversing with the mistress of the house. I inquired as to the milking abilities of their Shorthorns (this is a herd that has had several wins at Toronto), whereupon she informed me "We are better off now do not need to milk the cows, so we let the calves do it "an involuntary testimony as to the profitableness of the Shorthorn cow as a milker. I knew this herd well. As a boy, when working amongst a herd of Shorthorn cows of varying capacity as milkers, I remember some three or four out of twenty were good milkers, and one—a remarkable one—a light roan, low-set, a bit sharp over the withers, but deep through the chest, and with a great barrel, never heavily fleshed, but would gain up when dry; who, at calving, gave three strainerpails of milk a day for three weeks, and then two for a considerable length of time; and who, at a test, conducted with a crude boyish enthusiasm, gave 17½ pounds of butter in .7 days from the old shallow-pan method of setting milk. But, to refer to the roan cow, she produced several bulls. One was shown at Toronto in 1885; he was not good enough to win, but still was shown, and as a yearling weighed over 1,500 pounds. mother had milk fever after one calving, and was one of the half dozen whose products helped keep the house in store necessaries. We have followed too long the fetish of dairy form, and must, as has been said, recast our ideas of what a producing cow should look like.

To sum up the situation, the important points are to select your Shorthorns, handle them in a manner that milk may be produced; train up the heifers with an eye to a future as milkers; cull out the non-performers, and recast your ideas of what a milker and a milking Shorthorn should be like, and give the Shorthorn more encouragement in the show-ring. And, further, I must say that, to those who recognize the decadence (the term is used advisedly, as the breed in Canada has, for some time past, lost a valuable characteristic), for, as Mr. Bruce says, "The loss of milk in many herds is a direct one, but the mischief does not end with this. Our general experience is, where-

stock with milk, we may look in vain for old The powerful efforts of the breeding cows." leading agricultural journals on the North American continent, directed towards the rehabilitation of the breed, are at once an inspiration and a cause for thankfulness!

" HOMECROFT."

THE VIRTUES OF SHORTHORN MILK.

Editor "The Farmer's Advocate":

There is a great deal that is good in the article, "Considerations for Shorthorn Breeders," some is not so good, and some of it is mislead-The part that is misleading is the part that will weaken your power to impress which is good on your readers. The part thus alluded to is that where you lead your readers to believe that Shorthorns are not as good milkers This is not my as they were some years ago. experience, and, I believe, not the experience of the great bulk of Shorthorn breeders.

Another point which you wish to impress on your readers apparently is, that it is necessary to allow Shorthorns, not under the present rules eligible for registration in our herdbooks, to be imported and recorded here, that the milking qualities of our Shorthorns may be improved. If it is necessary to improve those qualities by the importation of English Shorthorns, there are plenty of full-pedigreed cows, and heifers, too, that are just as good milkers as those with short pedigrees; so that it is not that rule that would hinder their importation to Canada.

There can be no opposition to recording the performances of cows up to a certain standard of milk or butter production, but I would not like to have it called the appendix to the Dominion Shorthorn Herdbook. There could be a section of the volumes where such record could be kept, the same as that now allotted to the recording of prizes won at shows assisted by the Association.

I agree with you as to the importance of improving the milking qualities of our Shorthorns. Perhaps I could not agree with you as to how this may be brought about to best advantage. I agree with you that it should be possible to have on record the performances of high-class milking cows of the Shorthorn, as well as of the other breeds. This record will never have such a good showing as a like record for a purely dairy breed, for milk is not the only consideration.

There is a reason why the milking propensities of the Shorthorn should be encouraged, and it has not been mentioned by you, nor by any other writer on the subject, so far as I know. The milk given by a Shorthorn cow to her offspring produces flesh; it produces a bright, pink skin.; it produces soft, silky hair; it produces thriftiness and plumpness and beauty and strength. is the result of being reared on that kind of milk Would it be unnatural to for many generations. expect that, when this milk is given to human beings, young or old, they would be influenced by Would the milk that would make a calf thrive be more likely to suit a baby than the milk that would make an unthrifty calf? A young calf has a delicate stomach, and a great portion of the milk that is being given to children of tender age by those able to buy the most expensive necessaries and luxuries, would be rejected as not suitable for calf-rearing in a well-regulated establishment. Would milk that makes a blue or a vellow skin in a calf be as apt to produce the tint wanted in human beings as that milk produced by cows that have been bred for clear skins for a hundred years? Would the milk that cannot be digested by a calf be chosen offhand to give to babies, little or big? Would you choose the milk that is produced by skinny, bare-boned cows, and that will in its own kind produce skinny, bare-boned calves, if making a selection for the rearing of your children? We can find both kinds in Shorthorns; I know my choice.

ROBERT MILLER. [Note.—The question of how well the average milking quality of the modern Shorthorn compares with the average of twenty-five or thirty years ago, may be very well left to the judgment of commercial farmers like Mr. McMillan and Mr. Drury. We must, however, take occasion to correct a misapprehension that Mr. Miller has received from our editorial. We do not favor the importation of non-pedigree English Shorthorns. What we do urge is that the Dominion Shorthorn Breeders' Association adopt a system of official testing, under which every breeder who wishes may have his pedigreed cows tested for yearly milk and butter-fat production, under the supervision of the Department of Agriculture, and then, if their yield of milk and butter-fat comes up to a prescribed minimum set by the Association, that the name and performance of such cow be published in a Record of Performance within the herdbook, call it an appendix or what you will By such means, the breeder will be able to select intelligently for the development of his dual-purpose strain, the farmer will know where to buy dual-purpose bulls, and in time the dual-purpose function will be restored, and public confidence in