

Maritime Dairy School Course.

The eleventh session of the New Brunswick Provincial Dairy School will open on March 1st. From the 1st to the 16th the creamery course will be taken up, and from the 18th to the 22nd of April the course will be in the study of cheese-making. The teaching is free to all students from the Maritime Provinces, but the numbers for either course will be limited to thirty. Special attention will be given to instruction in making export saltless butter. The staff of instructors is as follows: J. F. Tilley, separating and cheese-making; Harvey Mitchell, milk testing and factory accounts; L. C. D'aigle, buttermaking and engineering; Robert Robertson, breeding and feeding dairy cattle; Richard Howes, repairing factory utensils. These instructors are all specialists in their different branches, and are the best practical men that can be obtained.

For information apply to Harvey Mitchell, Superintendent of Dairy School, Sussex, N.B.

Diluting Cream.

In discussing the dilution of heavy cream, a writer in the New York Produce Review and American Creamery, says:

"I should prefer skim milk to either whole milk or water for thinning a heavy cream. The water supply at most creameries is an unknown quantity. A complete chemical analysis might determine whether it was sufficiently pure, but the possible sources of contamination are usually so numerous that it would be rather risky to use it when either whole or skim milk could be obtained, as, though perhaps pure to-day, it might not be a few weeks or months later.

"I prefer skim to whole milk or water, for these reasons—in addition to my reasons for not using water as given above—the process of separation has removed a large amount of objectionable matter that is present in whole milk, and it is, in my opinion, much easier to detect faults in skim milk. Again, although milk is largely composed of water, and although, perhaps, a chemical analysis will show no difference between such water and that drawn from a well, still it seems to me that there is a difference not susceptible of analysis, but which, nevertheless, is potent in its influence, and that influence is for the good of the ultimate product—whether it be butter, cheese, or cream."

The Functions of the Cow.

It should be remembered that the useful dairy animal is a very busy member of society, a useful one, and should, therefore, be a highly respected one. She is not only the income maker of the dairy, but also the mother of the dairy—another source of income quite as important as that relating to milk and butter production—for business dairymen more and more each year come to realize that if we would have good cows we must raise them.

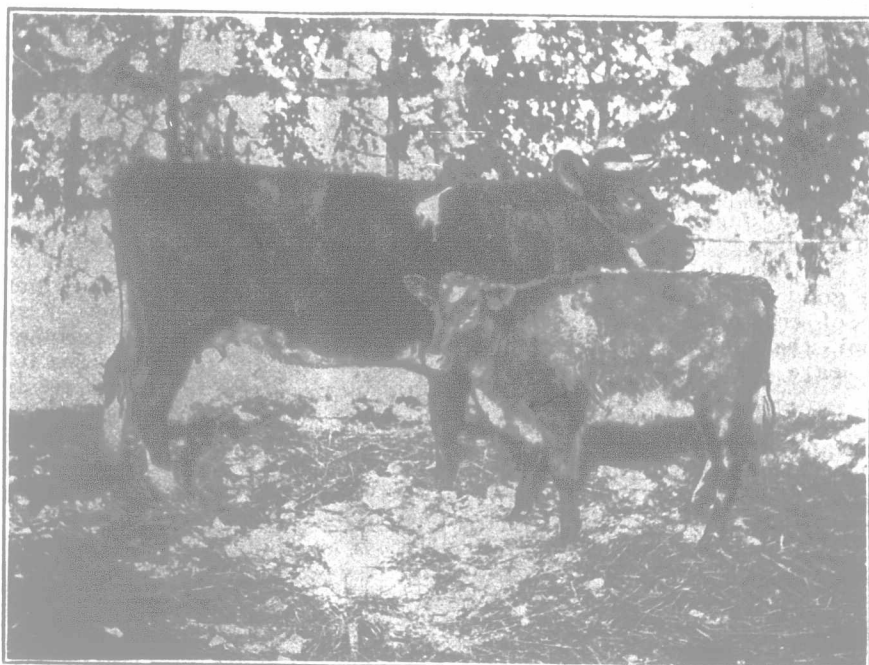
A really good cow, writes W. F. Sparran, in Farm and Fireside, is much like an investment that is paying a dividend far beyond the current interest value of money—the man who has it does not care to dispose of it. Ordinary three per cent. securities, like ordinary thirty cent cows, are plentiful and easy to get. The man who has a forty per cent. investment holds on to it. The man who has a seventy-five per cent. cow holds on to her, and takes care of her, so that she not only returns him her best profit in milk, but at the same time yields him a fine bonus coupon, in the shape of a good calf. Now, the cow that is doing these two things, and is maintaining her own strength and bodily vigor, so that her usefulness as a milker and a mother remains unimpaired, except, of course, for such natural wearing out as comes to all life, is doing a prodigious work, and upon her owner as her keeper rests the responsibility of her health and her powers of continued usefulness.

Man found the cow a mother only, and by his direction of her tendencies he has enlarged her into a profit-maker long after the period she in her early state was concerned in supplying sustenance to her offspring. This new life and widened usefulness of the good cow is one of the most beautiful and utilitarian evolutionary accomplishments of man. It is a great privilege for the man who thus develops the possibilities of a fellow creature, and thereby brings a great blessing to his fellow men. He is indeed a wise man who realizes and meets all the new needs of this new creature that has come under his care. In his hands her usefulness enlarges, or, at least, is carefully guarded against diminution. In the hands of the careless or the ignorant the good work is undone, and men complain of poor cows. All honor to our working motherhood, wherever it embellishes and beautifies and refines!

At the Wisconsin Experiment Station it was found that cows given warm water drank eight to ten pounds more per day than when supplied with cold. In one trial cows given warm water produced six per cent. more milk than those given cold, while in another trial the difference was only one per cent. in favor of warm water.

Breeding the Ayrshire Cow.

In recent years a good deal has been written about the Ayrshire cow, and various theories have been put forth as to her origin. About that we do not profess to know much. One thing we do know, we have now a distinct dairy breed, which every true breeder and fancier will endeavor to bring to the highest state of perfection, both as regards her appearance and also her rent-paying capacity. In Ayrshire, it is principally on the Ayrshire cow that a great many of the farmers have to depend for paying their



Missie of Avondale 2nd and Calf.

Included in dispersion sale of Shorthorn herd of Thos. Mercer, Markdale, Ont., February 21th. (See advt., page 176; Gossip, page 183.)

rent, and it is of the greatest importance that they should have a stock of cows that will produce the greatest amount of rich milk on the smallest amount of feeding. To know thoroughly about breeding, you must serve your time to the trade, watch all the various habits of the cow, and study the different strains.

A great difference of opinion prevails as to what are the proper points of an ideal cow, but almost all thorough, practical breeders are pretty well agreed on that point. The greatest trouble is to produce what you would like to.

The following are what are considered the proper points of a good cow:

The cow should be of good size.

sticking out prominently. The animal, when not milking, should carry a nice thickness of flesh behind the shoulder, and should be well thickened out and deep around the lungs and heart, so that she may have room to do her work properly.

The back should be straight, and the ribs well sprung out from the back.

The hook bones should be fairly wide and prominent, but not too wide and pointed, for that and a high cutting shoulder means extra food to keep the animal in decent condition.

The hind quarters should be long and square, and the tail should lie nicely into same. The thighs should be fairly thick, but not bulged out and beefy, and the hock should have a nice, natural curve. The cow should have fine, flat bones, show good substance, be deep at the flank, and the flank should run well into the thigh.

The skin should be fairly thin and loose, and covered with a nice, silky coat of hair.

The udder, when filled with milk, should be long, broad and level, running well onto the belly and up behind. The teats should set well apart, and hang perpendicularly; be of a good length and a little pointed; have a nice thin skin, and a silky feeling. The milk veins should stand out large and prominent along the belly in front of the udder, with a good-sized hole where they go through the rim of the belly. When the cow is milked the udder should go well away, and hang like a nice, loose skin, and not be bulky.

The animal should be able to move in a free and easy way, having a nice jaunty gait.

All these points are not necessary for a heavy milking cow. A great milker may be almost any shape. The greater the number of these points combined with a good milker, the greater will be the value of the animal. Cows of that description will command a good price anywhere, and at any time.

Having secured the ideal cow, the next point will be to secure a good bull to mate with her to produce something equal to and better than either, if possible. The selection of a good bull is of the greatest importance, and to that the breeder should pay great attention. The points for a good bull are much the same as those described for a good cow, only have him stronger in all his points, and having a good masculine appearance. In all breeds, and in wild animals and in the human being, it is natural for the male to be stronger and not so finely and evenly shaped as the female. Should you use a fine, evenly-shaped, feminine-looking bull, you are striving against nature, and that is a risky game to play at.

In the selection of a good bull there are two points necessary: (1) He should be of good quality, strong and hardy, and have a good constitution. (2) His dam should be a good healthy cow, giving a good quantity of rich milk, having big teats, and easily milked. Make sure of these two points, then get as many of the other

points already described as possible.

Next we come to the pedigree of the animal. Many people run down pedigree and the herdbook. Should a proper view be taken of it, there would be less said against it. There is no such thing as an unpedigreed animal. Every animal has a pedigree of some sort. Some have their pedigree correctly recorded, others have no record of their pedigree kept. Since animals show a strong tendency to breed back to some of the various strains they are descended from, it is of the



Broadhocks Golden Fame (Imp.).

Yearling Scotch-bred bull at head of Shorthorn herd of Thos. Mercer, Markdale, Ont., to be sold by auction, February 21th, as per advertisement, page 176; Gossip, page 183.

The head, a medium size, with the muzzle broad; wide between the eyes, and the eye clear, bright and standing out prominently. The forehead should be wide, and the horns should stand well up, but not too long nor too thick, with a good width between the tips.

The neck should not be over-long, but free from any thick fleshiness.

The shoulder should be firm, with the blades fitting well into the body. The fore shoulder should be well placed into the animal, and not