

### Getting into Good Stock

THE desire for improved dairy cattle, pure-breeds and grades, is very widespread. The following is a type of letter frequently received from Farm and Dairy readers who through our reading columns have gotten interested in pure bred stock:

"I desire to build up a pure-bred herd of dairy cattle. I have a farm of 65 acres, but my capital is limited, so limited that it would be impossible to sell out my herd of scrubs (I guess that's what you would call them), and put pure-breeds in their place. What would you advise me to do?"—York Co., Ont.

This letter was submitted to Mr. D. C. Flatt, the well-known Holstein breeder of Wentworth Co., Ont., and 1st vice-president of the Canadian Holstein-Friesian Association. Mr. Flatt answered as follows:

"The fact of a man admitting that he has scrub cattle and is too poor to buy pure-breeds is an admission that he will always be poor unless he makes the change. Less than two years ago I asked a man a price on two young pure-bred Holstein heifers. He did not care to price them so made him an offer of \$900 for the pair. His answer was 'I am too poor to sell them.' This was right, as the one heifer has since proved herself to be the champion of Canada in the Record of Performance, and is worth twice what I offered for the pair.

"My advice to all young men is to start right by buying pure-breeds. If he can't buy two, buy one, it being a good one. A good bull is half the herd and a poor bull is the whole herd. So no farmer can afford to use a poor bull, and the best way, if he is too poor to buy a good one, get four or five of his neighbors to go in with him. If these five farmers only average two pure-breeds each, they can well afford to keep a first-class bull. And if they pay particular attention to their business, in five years they can all afford to keep a first-class bull."

### Does Manure Pay for Labor?

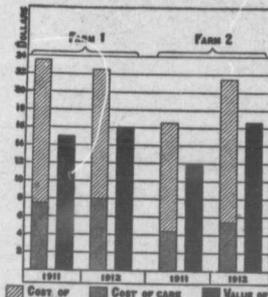
IN discussing the profits of dairy farming, or the lack of them, it has been customary to offset labor expense in caring for the dairy herd with the value of the manure produced. The correctness of this method of computation has recently been investigated on several dairy farms in Wisconsin by the Department of Economics of the Wisconsin Experimental Station at Madison. The drawing shows the results secured on two farms for a period of two years. On these farms the value of the manure was determined on the basis of the feeding records, each cow being credited with the manurial value of the feed she consumed. The labor was charged at the rate of 15 cents per man per hour, and included the labor of milking, feeding, and caring for the milk cows, but not the work of handling and marketing the milk.

"It will be noted," says the report on the investigation, "that in neither of these herds did the value of the manure pay for the labor. The average annual labor cost per cow ranged from \$16.24 to \$22.80, while the value of the manure averaged from \$12.04 to \$16.85.

Milking Chief Item of Labor  
It is also evident that milking is the chief item of labor.

Indeed, on most farms this amounts to from 85 to 88 per cent. of the total labor cost.' It has been found that the time consumed in feeding and caring for the cows varies considerably on different farms, depending on the convenience of the barn and equipment. For instance, the labor cost of feeding and care in 1911 was almost twice as great on Farm 1 as on Farm 2.

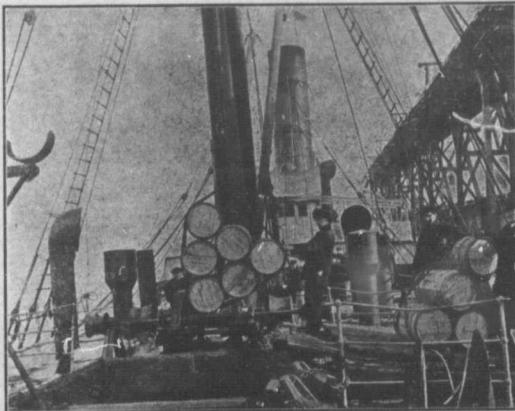
"Of most of the farms studied, the value of the manure has much more than paid for the



labor merely of feeding and caring for the herd (not including milking), as is indicated in the figure. This is important, for it shows undoubtedly that in the case of steers and young stock, the manure much more than offsets the labor cost.

#### Value of Records Demonstrated

The records of the first year revealed 'boarders' in both herds, and on Farm 2 very irregular feeding was also disclosed. Rations were not properly balanced, and by unscientific combinations the feed cost for some months would run as high as \$8.10 per cow. By disposing of his poor cows and benefiting from the lessons pointed out by the data, this farmer, who lost \$63.16 on his herd in 1911, made a clear profit of \$453.73 in 1912. At the end of the first year the first farmer also disposed of his poor cows, and thereby increased his profit from \$26.13 in 1911 to \$350.18 in 1912."



A Portion of Nova Scotia's Apple Crop Being Loaded for Export at Halifax

Principally as a result of the aggressive methods adopted by the United Fruit Growers, Ltd., Nova Scotia growers are finding a profitable market for their fruit, first in Western Canada and now in the Old Country. G. H. "Zoom, Dominion Fruit Inspector, may be seen at the extreme right keeping a careful eye on the quality of fruit and its handling for export.

### Proper Rearing of Calves

Prof. W. J. Fraser, University of Illinois

PROPER calf raising lies at the foundation of the whole dairy industry. One reason why we have so many poor cows is because of poorly raised calves. A well-bred cow is largely made or unmade the first 15 months of her life. Many good dairymen, with fine herds of cows, have little knowledge of proper calf raising. Thin and scrawny calves stunted for life are frequently seen in the dairy region and tell too plainly the truth of this statement. There is little poor calf raising in Denmark and Holland, and this is one reason they have such excellent cows in those countries.

The proper feeding and management of calves is just as important as the proper care of cows. The difficulty is, dairymen think they are engaged in milk production alone, and many of them are too short-sighted to see the necessity of acquiring the art of calf raising.

So much depends upon personal judgment in feeding calves to raise them successfully that it is difficult to lay down any fixed rule. Special care should be taken not to let the digestive organs become deranged, for if this happens it is difficult indeed to get the calf again into thriving condition. The chief difficulties in calf raising are: Overfeeding and irregularity in time, in temperature, quantity and sweetness of milk; and in cleanliness of feeding pails. The amount of milk should not be guessed at, but always weighed for each calf. One over-irregular feed may do an immense amount of damage.

While there are many difficulties in the way of feeding calves properly, three times a day, this should be done until the calf is two weeks old. A small calf should be fed at first not to exceed three pounds and a large calf four pounds of milk at feed time three times a day. Theoretically, it is much better to feed three times a day until the calf is two weeks old, but there is so much difficulty in getting the third feed pure, sweet, and at the proper temperature on many farms that it is more practical to feed but twice per day unless the cows are milked three times and the milk fed warm from the cow. The best general rule as to quantity is to feed one pound of milk for every 10 pounds live weight of the calf.

Whole milk should be fed for at least two weeks. If fresh skim milk is available from the separator on the farm, the whole milk may then be gradually dropped off, about one pound every two days, and the same amount of skim milk added. This amount of milk should be continued until the calf is about three months old. By this time it should be eating hay and grain, and the milk may be reduced rapidly until no more is fed.

Calves should be kept growing continuously and vigorously from birth. No grain should be fed after the calf is six months old if it can be kept in proper growing condition without it. A large barrel and digestive organs should be developed by feeding a good quality of roughage when not on pasture. After calves have reached six months of age they can be grown better and cheaper on good pasture or corn ensilage and good alfalfa hay than on any other feeds, and roughage is cheaper.