

amount of food at a dead loss, and entailing much labor without return, but they eat a hole into the profits derived from the cows that do pay. Poor cows hurt the dairy business more than poor markets, and much as Ontario dairymen lost during the past season from low prices, there can be little doubt that accurate statistics would show a still heavier loss from keeping cows which would be unprofitable even when cheese brought a fair figure.

Not long ago a dairyman near New York city published the results of an experiment, which is here in point. He selected twelve native cows, the best that could be procured in healthy localities, and added them to his dairy. They yielded under good treatment from February 9 to September 30—233 days—36,918 pounds of milk, or a daily average of $158\frac{1}{2}$ pounds, which is $13\frac{1}{4}$ pounds per cow, or exactly six quarts. As these cows were dry only about forty days, the yearly production amounts to 1,950 quarts, or 4,290 pounds each. From this statement the profit or loss in producing milk is made clear. At 2 cents per quart, which for cheese represents 10 cents per pound, and for butter 25 cents per pound, these cows each realized to the owner \$39.

But these prices are somewhat above the average. How much profit could a dairyman obtain from such cows during a season like that of 1879? How much can he get from them during an ordinary year? It is estimated that it costs about \$30 a year in hay, grain and pasture, to keep a cow's body and soul together. Extra feed must be given to secure any milk production. Add labour in the way of attendance, feeding, milking, and handling the milk, and you will see at a glance the value, or, rather, the worthlessness of a \$39 cow. But the cows in question were considered good natives. They were not bought at haphazard, but were carefully selected. There are better ones, no doubt, but it is quite as certain that there are worse ones, and I venture to say that there are more worse than better.

Prof. Arnold has put this point very forcibly in his admirable treatise on "American Dairying." I wish I dare flatter myself that every dairyman present at this meeting had bought and studied that book. But I fear only a small minority have done so, and therefore I will give the substance of his remarks on the point now under consideration. Taking \$30 as the cost of sustaining a cow, he supposes that \$5 worth of extra feed will enable her to produce milk for making 300 pounds of cheese, the net value of which is ten cents a pound. "Take another cow of the same weight (say 1,000 pounds) and it will cost the same to support her a year. But suppose she can convert \$10 worth of extra feed into milk, that will make 600 pounds of cheese. Though the first cow has manufactured each dollar's worth of extra food into six dollars worth of cheese, the profits on the small quantity she has manufactured will not pay for the keeping. While the second cow, by converting a larger quantity of food into cheese, has paid her keeping and left a handsome profit.

A comparison of results will stand thus :

COW NO. 1.	
Dr., to support one year.....	\$30 00
To extra feed for producing milk	5 00
Cr., by 300 lbs. of cheese	\$35 00
Loss.....	\$ 5 00

COW NO. 2.	
Dr., to support one year.....	\$30 00
To extra feed for milk	10 00
	\$40 00
Cr., by 600 lbs. of cheese	60 00
Profit	\$20 00

These imaginary figures do not vary much from actual facts. Prof. Arnold mentions a dairyman in Herkimer County, N. Y., who had what was considered a good dairy herd of 40 cows. He selected five of the best and five of the poorest cows, and carefully