cheesemaker to determine relative values of milk for cheesemaking, as delivered to the cheeseries of the country. To use a slang phrase, it is now "up to the cheesemakers" to take hold of this question, if they wish to be fair and just, and either test the milk individually, or devise some co-operative system of testing, thereby relieving the cheesemaker of the direct responsibility. Personally, we favor a co-operative system of testing, except in the case of large factories which can afford to engage a man to keep books, do the testing, and have a general oversight of the business. Serious dangers threaten the cheese business of Canada, not the least of which is inadequate returns for capital and labor required to produce the milk, which results partly from inferior cows and expensive feed; partly from unfair methods of distributing proceeds of sales, partly from our expensive system of marketing, and also as a result of competition from a source which can produce milk more cheaply than we can in Ontario on high-priced land and with expensive labor. Three of these drawbacks can be remedied by ourselves, and the best thought of Dairymen's Associations ought to be put forward to devise methods which will alleviate these difficulties. It will not do simply to pass a resolution or two at the annual meeting, for which everybody votes without giving any thought to the question, but something should be done which will touch the thought and practice of the people. Anything less than this will be labor and energy worse than wasted. What are we going to do about it, gentlemen of the cheese industry? H. H. DEAN.

Dairy Cow Contest Results.

The cost of milk production is bound to become a factor of very great interest amongst all good dairymen. The time when any kind of a milk cow is profitable is well past, and the many who heretofore have made money in dairying, but find it no longer a revenue producer, must either slowly go out of business or adopt the practical system of knowing just what each cow in the herd is doing, what milk actually costs, and what the profits are in conducting a dairy farm.

In the September 22nd issue, to stimulate this closer study of herd and individual cow production, there was offered twenty-five dollars, divided into three prizes, for the best discussions of the cost of milk production. The answers received have been exceedingly gratifying both in number and merit, and indicate not only that a good few men are now studying milk production carefully, but are getting results accordingly.

After careful study of all the contributions, and recognizing the slight deficiencies and the excellencies of each, we have placed the contribution of David Caughell, Elgin Co., Ont., first; that of H. S. Austin, Norfolk Co., Ont., second; that of A. F. Huffman, Hastings Co., third, and highly commended those of W. J. Main, Wentworth Co., Ont., and W. Hargrave, Waterloo Co., Ont. In making these awards, while recognition has been taken of the methods pursued, yet we have proceeded according to the intimations of the original announcement, and laid most stress on the completeness and accuracy of the statements presented. Below is to be found the first-prize article.

* * *

FIRST-PRIZE CONTRIBUTION.

In answer to your questions as to what it costs to produce 100 pounds of milk, I will try to give a detailed statement below, showing you what it costs to produce milk on my farm. You will observe that I do not figure in the calves, but, as I had some heifers that I never intended milking, I raised my pure-bred calves and vealed some grade calves on them, so that the raising of the calves and the milk sent to the cheese factory was done from different cows, so the calves have nothing to do with the production of the milk.

I have my cows freshening at different times of the year, so as to equalize the milking. The cows which we milked consisted of six pure-bred Holsteins and nine grade cows. Each cow's milk was weighed twice a day, and the pure-bred ones were milked and the milk weighed three times a day for from six to twelve weeks after freshening, and a record kept of it. As I was doing some official testing of my Holsteins during this year, I weighed the feed consumed both by the pure-bred and grade cows from time to time to see what effect feeding had on production; also changed the milkers from one cow to the other; found the cows to respond better to different milkers; tried feeding at different times of the day; also tried the effects of ventilation, saltings and watering, and I believe I can safely say that any man that does not weigh his milk and keep a record of his cows, will never produce milk at the same cost as the man who does and knows where he is at each and every day throughout the year. I have picked on the year 1909, as my milk was all made into cheese during this year, and I have the weights and returns from the factory, after paying for the making and hauling, on hand, making it very easy to get at. I will first give you the amount of milk sent each month, and the amount received for it:

	Amount of Milk. Lbs.	Amount Received.
January	12,231	$145.72
February	9,875	107.37
March	7,415	76.78
April	7,472	65.18
May	15,527	140.24
June	20,383	181.57
July	15,724	132.51
August	13,499	116.29
September	12,432	116.36
October	11,585	114.50
November	7,969	79.05
December	9,817	98.17
Total	143,959	$1,373.74

I will next give the amount of feed consumed by the fifteen cows for the different months:

	Silage.	Roots.	Alfalfa.	Chop. Oats.	Oil Cake.	Straw for Bedding.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
January	18,500	7,000	5,300	2,000	400	3,000
February	16,700	6,800	4,650	1,500	300	2,800
March	18,500	7,500	5,300	1,000	200	3,000
April	18,000	7,000	5,300	1,000	200	3,000
May	15,000	5,000	3,500	2,000	400	2,500
June				1,000		
July				500		
August				500		
September				500		
October	12,000		500	500		
November	16,000	4,200	4,150	1,000		2,000
December	18,500	7,500	5,300	1,200		3,000
Total	133,200	45,000	34,000	12,700	1,500	19,300

Value of Food Consumed.

Silage, 133,200 lbs., at $3 per ton	$ 182.00
Roots, 45,000 lbs., at $3 per ton	69.00
Alfalfa, 34,000 lbs., at $8 per ton	136.00
Oat chop, 12,700 lbs., at $1.50 per cwt.	190.50
Oil cake, 1,500 lbs., at $1.70 per cwt.	25.50
Straw, 19,300 lbs., at $4 per ton	38.50
Pasture, 15 cows, at $1.50 per month for six months	135.00
Salt	3.00
Cost of milking 15 cows, at $1.00 per month for ten months	150.00
Cost of milking six cows once a day extra for eight weeks	10.00
Cost of feeding and care for six months.	90.00
Total cost of production	$1,068.50

Value Placed on Manure.

60 tons of silage, at $1 per ton	$ 60.00
22½ tons of roots, at 50c. per ton	11.25
17 tons of alfalfa, at $7 per ton	119.00
6⅓ tons oat chop, at $6 per ton	38.00
¾ ton of oil cake, at $12 per ton	9.00
9½ tons of straw, at $3 per ton	28.50
Total value of manure	$265.75
Gross cost of production	$1,068.50
Value of manure	265.75
Net cost of production	$ 802.75

I have made no allowance for the whey, but, as we are on a large milk route, we don't fare very well for whey some of the time, and I consider what we get would about pay for the emptying and washing the cans, cooling the milk, and bringing the cows from the fields in the summer. So, according to my way of figuring, it cost me $802.75 to produce 143,959 pounds of milk, or 55.76 cents per cwt.; and, as I received 95.42 cents per cwt. from the factory, I had a profit of 39.66 cents per cwt. for my milk.

Elgin Co., Ont. DAVID CAUGHELL.

English Milk Prices.

(Our English correspondence.)

English farmers are much dissatisfied at the wholesale prices of milk, and claim that the high cost of mill stuffs and dairy cows leaves little or no margins. The public health authorities, too, are strict in their requirements, and these add to cost of production. The prices received by farmers for milk average about 6d. per gallon in summer, and 8d. for winter, and the margin for profit is certainly small. If contracts could be made on the basis of 8d. and 10d., there would be a reasonable profit. The greatest obstacle to getting an increase of prices is the lack of combination amongst milk producers. They are too prone to act independently, and this leaves them largely at the mercy of the middlemen, who are very closely organized. These middlemen retail the milk to consumers at 1s. 4d. per gallon, a price which leaves a large profit. It would seem that dairy farmers must combine into associations, as is done in other industries, before they can successfully demand higher prices for their product.

The Real Thing.

A Toronto Fresh-air Fund boy, who had never enjoyed the privilege of living in the country before, spent two weeks during the past summer with a real dairy farmer. For breakfast, the goodwife regaled him with a bowl of wholesome unskimmed milk. "Well, now, what's this?" he asked. "Why, that's milk," replied the lady, rather amused at his innocence. "Where does it come from?" the lad further queried. "Why, we get it from the cows, of course," was the reply. "My! I wish our milkman kept cows," was the boy's final comment as he washed down the rolled-wheat porridge.

Cows Appreciate Paderewski.

From Michigan comes the story that the phonograph is a valuable adjunct in the dairy barn; that, by such music, both the amount and fat content of the milk have been markedly increased. The first use of the music in a dairy happened accidentally, but an influence seeming to be apparent, it was continued experimentally, and now, according to report, that serviceable bit of machinery has a permanent place in at least one dairy barn. Mayhap the influence on the milkers is as great as on the cows, both in sweeting their humor and, through a selection of music, increasing their speed.

GARDEN & ORCHARD.

Single Fare to Ontario Horticultural Exhibition.

Prize lists of the Ontario Horticultural Exhibition, to be held in St. Lawrence Arena, Toronto, November 15th to 19th, may be obtained on application to Secretary P. W. Hodgetts, Parliament Buildings, Toronto. Practically single-fare rates will obtain on the railroads to all persons visiting the exhibition from points outside Toronto, as follows:

From Tuesday to Saturday, November 15th to 19th, special excursions will be run by the railways to Toronto, from all points in Ontario where first-class single fare does not exceed $2.50, at lowest one-way, first-class fare, plus 25c. for admission coupon to the show. Railway tickets bought on these dates will be good for return up to and including November 21st. People desiring to attend the exhibition on other dates, and from places where the single fare exceeds 50c., will be able to do so for first-class single fare, but it will be necessary for them to obtain standard certificates from their station agent when they purchase their tickets to Toronto. One-way tickets to Toronto, with standard convention certificates, can be purchased from November 11th to 19th, inclusive, and will be honored for the return journey free, regardless of the number in attendance, up to and including November 23rd, 1910. These certificates must be endorsed by the Secretary at the Exhibition before they will be honored by the railways for the return trip. A fee of 25c. will be charged by the railway company for each certificate vised.

California Apples in Toronto.

A car of California fruit, consisting of Spitz and other red varieties, sold easily in Toronto lately on the day they arrived at from $2.00 to $2.50 a box—proving plainly that there is a lucrative demand in our cities for fancy-looking fruit skilfully box-packed. Our fruit-growers have still some lessons in enterprise to learn from Western growers.