

to keep the bowels in a right state, as shown by the excrements. When skim milk is available, that is best after one month old, and raising calves is an easy matter; but just as good results can be obtained by giving whole milk, adding water as the calf gets older, and teaching it to take other feed. Too often, a calf, after five or six months old, has to hustle for itself, and, if it has had proper care so far, is allowed to go back. This should not be, as the young things should be kept growing steadily. I find nothing so good for young cattle and calves, after six months old, as rape. It is a fine thing to have some rape to turn them on in August, September and October, when other pasture is poor. Calves should not be turned on it under six months old, but, when born early in the year, say in February, they can be fed on rape pasture, which makes very cheap feed and saves labor of attending to the calves. And they are more healthy outside than in the barn, where, perhaps, they are

shut in some dark pen, away from flies, but also away from good air and sunshine. Flies do not hurt the young things outside if they have plenty of feed, and there is nothing as good as rape to make young cattle grow. But milk cows should never be fed on it, as it spoils the flavor of the milk.  
GEO. RICE.

MILK FEVER.

A short time ago, at a meeting of the Glasgow and West of Scotland Agricultural Discussion Society, Mr. Pollock, Springside, Howwood, expressed a wish that science would find a method of decreasing the losses of dairy farmers from milk fever. A writer in the Scottish Farmer takes ground, which "The Farmer's Advocate" has repeatedly claimed as its conviction on this question in the following paragraph: "I think this can be done by following nature a little more closely than is general, and without any aid from science. In a state of nature the young of any animal,

as soon as born, takes its mother's milk in small quantities at short intervals, 'little and often' being its practice. If a calf be left with its mother the same thing happens, nature being followed exactly. If, however, as is often the case, the calf be taken from its mother at birth, then nature should be copied, and a little milk taken from the cow by hand, at short intervals. Never empty the bag—that is, udder—of a newly-calved cow until the calf is at least three days old, and deaths from milk fever will practically cease. This was told me many years ago by a farmer who kept a very large herd of cows, on rich pasture, in Leicestershire, and he added, 'Since I was told of this plan years ago by an old cowlcch—that is, unqualified cow doctor—I have not lost a cow from milk fever, whereas before I invariably lost several every year.' My own experience coincides with his. But, and here is the rub, see that the plan is carried out fully, and do not be satisfied with being told that it has been, because most men in charge of cows think that it makes no difference whether the cow is milked dry sooner or later."

Western Ontario Dairymen's Convention at Woodstock.

The forty-first annual convention of the Dairymen's Association of Western Ontario was held in Woodstock, January 15th and 16th. President John McQuaker, after a few opening remarks, presented the directors' report, which remarked that the past season's experience had been most encouraging to the patrons of cheese factories and creameries; high prices prevailing. Steady progress is being made in the quality and finish of our cheese, and improvement is also shown in the quality of creamery butter, the greater percentage of which has been consumed at home this year. A large amount of money is being spent in improvements of cheese factories and creameries, their equipment and surroundings, under the improved system of instruction and sanitary inspection. Every factory and creamery has been visited at least once, and almost all have had from four to six visits by the instructors. There has been spent the past year in Western Ontario in improvements \$35,882 on cheese factories, and \$16,954 on creameries. Appreciation was expressed of the interest of the Minister of Agriculture, Hon. Nelson Monteith, and the substantial financial assistance which the Government continues to give to the Association. Prospects for the future of the dairy business in Canada are bright.

The directors, recognizing the cheese and butter exhibit, held in connection with the convention as one of its prominent educative features, were gratified with the interest in the competition manifested by the makers. In connection with this exhibit this year, instead of having a scoring contest, it was thought that better educative results might be obtained if one or more cheese were purchased by the Association, and allowed to be examined by anyone who wished, and scored, if desired.

A special officer was appointed early last season to deal with cases of milk adulteration. This system has worked out very well, and bids fair to materially discourage the tendency to deliver adulterated milk at the cheese factories. A number of convictions have resulted, and they hoped to have this feature of the work continued, and the law so rigidly enforced that the dishonest man who tampers with his milk, thereby doing himself a wrong as well as his fellow patron, may find it the wiser policy to do the right thing. A committee was appointed by the directors to meet a committee of the Eastern Association to consider the advisability of revising the dairy laws, particularly that portion relating to fines for delivering deteriorated milk. These fines, it was recommended to have raised.

The financial report, presented by Secretary Frank Hens, showed balance carried forward of \$1,120.43, plus receipts of \$5,179.26, making up a total credit of \$6,299.69, and disbursements, \$4,881.97, leaving a balance on hand of \$1,417.72.

THE DAIRY-HERD COMPETITION.

Owing to the generosity of Ryrie Bros., of Toronto, the directors were again able to offer a silver and a bronze medal for a dairy-herd competition. The regulations were the same as last year, except that instead of the medals being offered for the most money per cow, they were offered to the patrons furnishing the most milk per cow to a cheese factory, and the most butter-fat per cow to a creamery, from April 1st to October 1st, 1907, there to be not less than eight cows in the herd, and the figures to be taken from the factory books and certified as correct by the secretary or maker. As no creamery patrons entered, the bronze medal was a second prize for the cheese-factory competition. The silver medal was won by W. E. Thompson, of Inverkip, with an average amount of milk of 8,020 pounds, and the bronze medal by Wm. Pearce, of Holland, with an average of 7,571½ pounds milk per cow. Following is a tabulated statement of the dairy-herd competition.

NAME.	ADDRESS.	BREED OF COWS.	No. of Acres in Farm.	No. of Cows in Herd.	Total lbs. of Milk Sent to Factory.	Average lbs. of Milk per Cow.	Total Money Received.	Average amount of Money per Cow.
J. W. Cornish,	Harrisville—8 grade Holsteins, 1 grade Ayrshire, 1 grade Durham and Holstein		50	10	64,321	6,432	\$806.73	\$80.67
Wm. Pearce,	Holbrook—grade Holstein		50	8	60,572	7,571½	\$65.02	\$73.12½
S. Cuthbert,	Seward—grade Holstein		75	15	102,161	6,810	967.14	64.47
Mason Bros.,	Tyrrell—grade Holstein		280	21	156,986	7,475½	1,375.93	65.52
M. Swaine,	Springford—Holstein and Durham		125	12	79,380	6,615	730.63	60.89
W. E. Thompson,	Inverkip and Woodstock—Holstein and Holstein grades		100	12	96,240	8,020	934.64	77.881
N. S. Ballantyne,	Atwood		12	21	118,878	5,660.7	1,314.64	54.77
H. Gleason,	Medina Farmers Union—Holstein		150	24	133,408	5,558.3		

HOW THE WINNER'S HERD IS HANDLED.

The following description of how his herd was handled has been especially prepared for "The Farmer's Advocate" by Mr. Thomson: My herd number in all twenty-eight head, ten pure-bred Holsteins, the balance Holstein grades. The largest number milked at any one time during the year was fourteen, including a two-year-old heifer, whose milk was used for family purposes. During the seven months of the contest, I sent, on an average, the milk from twelve cows, which gave a total of 96,240 pounds of milk testing 3.5 per cent. of fat, making an average per cow of 8,020 pounds. Two of these cows freshened in October, 1906, two in January, 1907, five in March, and the balance in April and May. The total pounds of milk given by the fourteen cows for the whole season was 142,418, making an average of 10,172 pounds milk per cow.

This is my method of feeding in winter: In the morning, the first thing we do is to milk the cows; then the roots and meal are fed, after which the straw or hay. The water is always before them. At noon we give a feed of cut corn. In the evening, say five or half-past, we again milk, and the roots and meal are fed again, followed by straw or chaff. This diet is continued until about first of March, when hay is fed in place of straw. The meal consists usually of a mixture of barley and oats. When necessary to supplement this, some bran is added, together with something stronger, such as low-grade flour or ground wheat, which brings the mixture to about the same weight as the barley and oats. The milking cows receive of this about a gallon each, twice a day. I find that even when my cows are not fed to their full capacity, as, when fed

a feed of meal at noon, give considerable increase in the quantity of milk. Cows give a greater return when freshening in the months of December, January and February, and, if well fed, will give nearly as much milk during the summer as those which freshen in April or May.

In the summer, the cows are tied in the stable for milking, and if the flies are on them, they are sprayed with a proprietary preparation. When the pasture is beginning to get dry and short, we give one quart of meal and two quarts of wheat bran twice daily until green feed, such as corn or roots, may be used.

We try, as far as possible, to study their comfort; if it is wet or cold, they are kept in all night, and given a feed of hay or corn. We have always to form some idea of what each cow has done for the season, but not until this past year have we done it intelligently. Have been working in connection with the Spring Creek Cow-testing Association for nearly a year, weighing the milk and taking samples, which have been tested by a man sent for that purpose. This enables one to find out intelligently the value of each individual cow.

THE OBJECT OF THE COW-TESTING.

C. F. Whitley, of the Dominion Dairy and Cold-storage Commissioner's staff, gave substantially the same address as at Picton, for report of which see "The Farmer's Advocate" of January 16th. A few points, however, may bear reiteration. The object of the cow-testing work is to induce a careful study of each individual cow in the herd, with a view to building up a race of cows that will produce a large quantity of good milk economically.

Put your money in the bank, and you draw bank interest; put it in Cobalt, and you lose it. Many of the dairymen in the cow-testing associations are deriving 30 per cent. interest on the money invested in good dairy cows.

Let us bend our energies to push the cow-testing work, and double the production of Canadian dairy cows in the next five years.

DUTCH DAIRYING.

Following Mr. Whitley, Commissioner J. A. Ruddick remarked that if the yield of the 2,000,000 cows in Canada, enumerated by the last census, which now give less than 4,000 pounds of milk apiece, could be raised to the standard of Mr. Thomson's herd, and if the milk were estimated at \$1.00 per cwt., the value of the dairy output of Canada would be increased by 80 millions of dollars. We think we are doing well at the dairy business in Canada, but other countries are away ahead of us. Holland, with an area of a little over 12,000 square miles, has less than a million cows, yet, after feeding their own population of five millions, they exported last year \$27,000,000 worth of butter and cheese. The Danes and the Dutch are beating us a long way in the production of milk. So far as the manufacture is concerned, our makers stand well at the top. A member of the audience suggested that the reason the Dutch exported so much dairy produce more than we was because they ate less, to which Mr. Ruddick objected, saying that they do eat very large quantities, but they produce so much more per cow. He submitted some figures from a creamery in Friesland, supplied by 1,150 cows, which averaged 8,460 pounds of milk per cow over the whole section. He also cited the case of one Holstein cow that gave 21,529 pounds of milk in 365 days. Of course, the pastures of Holland are probably not equalled anywhere else in the world. He had seen them grazing a cow to the acre. He cited the case of one Dutch dairy farm of 105 acres, on which were kept 35 cows, 8 heifers, 25 calves, 2 horses, and 25 milking ewes, and the farm raised all the feed except some meal for the cattle.

NOT HOLSTEIN, BUT DUTCH CATTLE.

By the way, he said, the Dutch people claim the cows we call Holsteins are not Holsteins, but Dutch cattle. Their name would imply that they came from one of the provinces of Holstein, in Germany. He himself was not prepared to pronounce upon the origin of the breed.

TERMS OF COW-TESTING WORK FOR 1908.

Regarding the cow-testing work, for which there is to be made this year a small charge of 20 cents per