

season the bean planter is the best, as it leaves a ridge on the row, and the water cannot lie in the hollow and bake the ground. But the bean planter needs two men to follow it, while one man can work the drill and put in more in a day. When the beans are showing through the ground, we put the harrow on them. This kills any small weeds that may have escaped the first cultivating, and also levels in the hollow made by the drill. Then, in a day or two, they are ready for cultivating. Some use a two-horse cultivator made for the purpose, but I am conservative enough to believe that better work can be done with the one-horse cultivator. However, that is a matter of opinion. The last few years we have cultivated the beans but twice, and have not found it necessary to hoe at all, cultivating once as soon as the beans are large enough and again as soon as you see any weeds appearing, or as late as you can before they begin to blossom or cover the row. When the pods begin to get yellow or ripen, go in and pull the beans, then take a side-delivery rake and turn them out (which will handle as much as six men can the old way with forks). When they are thoroughly dry haul them in, or, if it should be a wet season and the ground damp, they may need turning, which can be done quickly with the side-delivery rake. As beans are apt to draw moisture, care must be taken to get them in dry, or they will spoil in the mow.

After the bean crop is off, the land is in good shape for fall wheat; all that is necessary is a few strokes of the cultivator to loosen the soil. We planted only ten acres this year, off which we threshed 270 bushels from the machine, but as beans weigh more than 60 pounds to the bushel, they should weigh out nearly 300 bushels, for which we have been offered \$1.45 per bushel. We did not put over two weeks' work for one man on the crop after they were sown—cultivating, harrowing, and all combined—so that, under favorable circumstances, bean-growing is a fairly profitable line of farming. Hoping that others may be influenced to give their methods of bean-raising for the benefit of all, I am a staunch advocate of "The Farmer's Advocate."

Kent Co., Ont.

GEO. B. NEWMAN.

Nice Sides of Bacon.

To the Editor "The Farmer's Advocate":

May I venture to write a few lines to your valuable paper regarding bacon hogs and how I raise them? At present I have two white sows, one a Yorkshire, the other Yorkshire and Berkshire cross; also one pure Berkshire sow. I breed my white sows to a Berkshire hog, and my Berkshire sow to a Yorkshire hog, and get all white pigs. I have not had a crippled pig for years. I never rush them in feeding. They have always paid me well, as I always get the best price, as they all turn out select. Now as to long bacon, is it not the packer alone that is looking for it to add a little to his profit? Does not the consumer look for the best, nicest and sweetest, regardless of length? Why, then, feed the longest and largest of any breed to no profit? I wish to say a little of what I have learned from cutting up pork into sausage, having done more than the average farmer at this business. I never had any trouble to fill an order for a fat side, but an order for something nice, not too fat, was harder to fill, and I want to say that the nicest side by far that I ever found was in a Berkshire about one year old. I, however, do not mean to be understood that the Berkshire is the only breed that has a nice side, as I believe the age had more to do with it than the breed. In conclusion I would say, that if I were feeding for my own curing and eating, I would not try to have them finished in six months, but give them plenty of time to get size without so much fat.

T. McD.

York Co., Ont.

The Bravest Battles.

The bravest battle that ever was fought,
Shall I tell you where and when?
On the maps of the world you'll find it not;
'Twas fought by the mothers of men.

Nay, not with cannon or battle shot,
With sword or noble pen;
Nay, not with eloquent word or thought,
From the mouths of wonderful men.

But deep in the walled-up woman's heart—
Of woman that would not yield,
But bravely, silently bore her part—
Lo! there is the battlefield.

No marshalling troop, no bivouac song,
No banner to gleam and wave!
But, oh these battles; they last so long,
From babyhood to the grave.

—Joaquin Miller.

The Weekly is the Best.

I used to think when you changed "The Farmer's Advocate" to a weekly it would not be so good, but now I think it is improving all the time, and is better than ever. Renewal enclosed. Wishing you continued success, I am, Yours truly,

Carleton Co., Ont. JAMES A. ROBINSON.

THE DAIRY.

A Year's Milk and Butter Record.

Reg. No.	Name.	Age in years.	Pounds of milk.	Average per cent. of butter-fat.	Estimated lbs. of butter.	Value at 22 cents per pound.
11132	Irena	7	8944	4.1	427	\$93.94
11129	Peace	7	8157	4.	394	86.68
11119	Dinah	7	7674	4.2	375	82.50
17602	Constance	4	7813	4.1	373	82.06
19895	Millie	5	7556	3.9	343	75.46
11125	Lady Ethel	7	7005	4.2	343	75.46
11124	Infelice	7	7137	4.	332	73.04
8881	Miss Violet	8	7489	3.8	331	72.82
6264	Minnie May	13	6986	4.	325	71.50
11118	Delta Maid	7	7064	3.8	312	68.64
13044	Jessie of Kelso	5	6674	3.9	291	64.02
11130	Peggotty	7	6728	3.7	289	63.58
17611	White Rose	5	6151	4.	287	63.14
17197	Miss Vernie	4	5943	4.	272	59.84
11402	Ruth of Kelso	6	5869	3.8	260	57.20
	Spotty	9	7934	4.1	379	83.38
	Gipsy	9	7410	4.2	362	79.64
	Lizzie	8	7828	3.7	337	74.14
	Topsy	4	7518	3.8	333	73.26
	Flossie	9	7519	3.8	333	73.26
	Red Rose	7	6751	4.	315	69.30
	Jane	8	7019	3.8	311	68.42
	Maggie	4	6806	3.8	300	66.00
	Carrie	13	5707	4.5	300	66.00
	Tena	8	6781	3.7	293	64.41
	Jenny	11	6018	3.7	285	62.70
	Doll	3	5473	4.	255	56.10
	Jersey	8	4635	4.6	248	54.56
Average per cow.....			6956	3.9	321.6	\$70.75
Total amount of milk.....			194,789 lbs.			
Total amount of butter.....			9,005 lbs.			
Value, at 22 cents per lb.....			\$1,981.10			
Value of skim milk, at 15c. per cwt.			245.49			

The above is the record of my herd for 1905. Owing to good pasturage all season, we fed no grain from May 15th to October 26th. Had we done so, I think the record would have been better. W. F. STEPHEN.

Huntingdon, Que.

[Note.—This is dairying in black and white. We consider that Mr. Stephen deserves the highest praise for his enterprise in keeping such a record. Let us hear from others engaged in the good work.—Ed.]

Prof. Dean Replies to Mr. Bollert.

To the Editor "The Farmer's Advocate":

May I have three short whacks at that "nut" (issue Feb. 1st)?

1. It was far from my thought to reflect on the integrity of breeders of pure-bred cattle. I have always assumed that a man is honest until he has proven to be a rogue, rather than that he is a rogue until he proves to be honest. In the particular instance referred to, I wot that through ignorance he did it.

2. The most unkindest cut of all is that which my good friend Mr. Bollert gives, when he suggests that "more brains" should have been exercised in the purchase of these pedigreed cattle. I may as well plead guilty to the soft impeachment, and can only account for it by saying that the circumstance took place soon after the writer graduated from college, when his brain had the "triple wedges" of a dairy cow so firmly driven into his head that the only other things he could see about a cow were a prominent backbone and a long, slim tail.

3. The formation of "Cow-testing Associations" in various parts of Canada, to test common cows, and the fact that the Dominion Department of Agriculture have, or shortly will have, provided machinery whereby breeders of pure-bred dairy stock may have their cows tested officially, are two signs of the times which point to a revival among owners of dairy cows. There are, no doubt, difficulties in the way, but Canadian pluck and determination will overcome all these. Nothing can stop the ball which has now been set rolling. If seven-day tests have been of the "greatest benefit" to one breed, then tests for a longer time ought to be of greater benefit, not only to this breed, but to all the breeds concerned. I sincerely trust that this work of testing cows will be carried on by all those interested in the improvement of dairy stock.

H. H. DEAN.

Know Your Cows.

CO-OPERATIVE TESTING OF COWS.

One of the most important points brought up at the Eastern and Western Ontario Dairymen's convention last month, was the testing of cows by co-operative testing associations. It was announced that the Dominion Minister of Agriculture, Hon. Sydney Fisher, had expressed his willingness to supply a Departmental man to do the testing wherever twenty or more farmers in a locality were willing to purchase the necessary inexpensive outfit of scales, sample bottles and sampling dipper, and undertake to weigh the milk of each cow for a specified number of days each month, and take the samples for testing. One cow-testing association had already been formed, at Cowansville, P. Q., as reported in our issue of January 18th, by turning up which number our readers will gain from the by-laws an exact idea of the simple character of the organization. The Dairy Branch of the Department of Agriculture is anxious that more of these associations be organized, and is ready to assist in their formation wherever there is a prospect of a sufficient number of dairymen being interested. Those desirous of launching such a scheme in their locality may correspond with Dairy Commissioner J. A. Ruddick, Ottawa, Ont., or with Mr. C. F. Whitely, Experimental Farm, Ottawa.

While the Dairy Commissioner deserves credit for introducing this co-operative cow-testing movement, it was brought out at the Western Dairymen's convention that the chances of success will be greatest where the farmers organize themselves and do not rely upon the Government employee. It was suggested that dairymen should organize with the creamery or cheese-factory district as the unit of territory, the maker doing the testing for the patrons. This is a good plan, and should result in a considerable enlightenment of cow owners, a weeding process, an increased milk supply, and, consequently, an improved quality of milk—for it is the general experience of makers that when the patrons of a district commence to take an interest in the production of their herds they are more open to suggestions of all kinds; progress is manifested in their whole dairy work, and they are far more likely to take first-class care of their milk.

DON'T WAIT FOR A CO-OPERATIVE TESTING ASSOCIATION.

But in cow-testing, as in other matters, we believe the greatest success will be achieved by those who undertake the work individually. Cow-testing associations are all right for such as will not undertake the work otherwise. Then, too, no dairymen who really wishes to get at the true inwardness of profitable production will be satisfied with weighing the milk of his cows only three days a month. It should be done every milking in the year, and an exact record kept. Why? For the sake of the lessons it teaches and the assistance it gives one in feeding. In most of the talk about milk records, undue emphasis is laid on the opportunity for weeding out the poor cows. This certainly is a most important advantage, but it is far from being the only one. A DAILY MILK RECORD ENABLES THE INTELLIGENT HERDSMAN TO GET MUCH BETTER YIELDS FROM THE COWS HE ALREADY HAS. It increases his interest in the herd, and when he gets his interest focussed on the welfare of his cows he is going to take more pains, do better work and get bigger yields. In dairying, as in all phases of stock husbandry, the man is the most important factor in the equation of success. The trouble with most dairying is too much cow and too little man. The milk record pays first, then, because it stimulates the personal factor. It enables one to feed better. He can tell pretty accurately the effect of any change in feed or management; he can study the individuality of his cows; the ration that best suits one cow will not be best for another. There is a wider difference in the requirements of individual cows than the majority of people suspect, and surprising possibilities in catering thereto.

THE MILK RECORD AN EDUCATOR.

Milk records are an invaluable educator. They teach the importance of good feeding, balanced rations, succulence, comfortable quarters, kindness, attention, regular and careful milking, and dozens of other things that bulk quite respectably on the profit-and-loss sheet. They take dairying from the chaos of guesswork and place it on a business basis. The keeping of individual records would pay handsomely even if one never discarded a single cow. Of course, nothing is more certain than that he would find some to discard at once, and others which he would keep only until he had raised up heifers from the best cows to take their places. The possibility of thus improving the average production by more intelligent care and by selection are immense, and the satisfaction of the work is an additional compensation. Some claim that keeping records takes too much time in this day of scarce labor. As a matter of fact, the time required is comparatively little, and the high price of labor, so far from being a deterrent, should be regarded as the strongest possible reason for doing this work. The dairymen who cannot afford to pay present prices of labor is the one with poor-yielding cows, and the longer he keeps on with the old cows and the old methods the harder will it be to make ends meet.

AN EXPERIENCE WITH THE DAILY RECORD.

A little experience may be in order here. Five years ago the writer was in charge of a small herd of ordinary grade cows, most of which were due to calve along