

have been making "short-time tests" they will surely be convinced that the shorter the test the more room there is for manipulation and of gaining undue advantages.

At the time of writing I do not know what decision was reached by the annual meeting of the Agrarians or Holstein associations, but trust that the Live Stock Commissioner will not sanction any change proposed by any breeder or breeders' association unless such change has been submitted and approved by representatives of other associations.

The nationalities of our association has been of great advantage to the Live Stock industry and I trust, therefore, that nothing will happen to get away from the national idea of uniform standard. We live in a freedom loving country and any attempt to tell a man how many times he shall milk his cows, or that he is not to be allowed to make persistent milkers of his heifers and allow them to the number of cows under test, rather than an increase.

Finish Beef Cattle Economically It Can Be Done With Little Grain

Prof. G. E. Day, Secretary, Dominion Shorthorn Breeders' Association.

IN normal times it is counted good business to give our beef cattle a good degree of finish before sending them to market. The higher price obtainable for well finished cattle has usually been profitable to the feeder.

At the present time, however, we are facing decidedly abnormal conditions. Statistics indicate that the world is facing a heavy shortage of wheat. If these statistics are correct it looks as though it might be necessary to use grains heretofore employed almost exclusively for the feeding of animals, to help out the supply of wheat. As a matter of fact, investigations are in progress to determine the extent to which wheat flour may be adulterated with the four of other cereals and still retain its palatability for human consumption.

If it becomes necessary, therefore, to utilize the coarser cereals for human food it must mean a shortage of concentrates for fattening animals, and the question arises whether, under present prospects, we should not make a special effort to use the smallest possible amount of concentrates, and utilize, to the fullest extent, bulky fodders in the fattening of our cattle.

One Pound of Grain Per Pound Gain.

Some years ago the Ontario Agricultural College secured a gain in weight of 2,150 lbs. in the case of fattening steers, from the use of 2,157 lbs. of ground barley and 729 lbs. bran. This is very little more than one pound of concentrates used for each pound of gain in weight, the balance of the ration being made up of hay, corn silage and roots. In the proportion of 1, 2 and 3, respectively. The steers used in this experiment were cheap, common cattle, and the gains they made were not large, being approximately 1 1/2 lbs. per steer, per day, for a period of 165 days. The cattle were not well finished when marketed, and dressed a little less than 67 per cent. of their live weight, but the beef from these cattle was much superior to a great deal of the beef we are forced to consume in these days, and, as has been pointed out, it was produced with the use of a very small quantity of material which was fit for human consumption.

One thing is certain, we cannot produce the maximum amount of highly finished beef, and, at the same time, produce the maximum amount of cereals for human consumption. It would seem, therefore, the part of wisdom to economize on the use of cereals grains in the feeding of beef cattle, and to utilize to the fullest extent bulky fodders, even though we have

to content with smaller gains in weight and a poorer quality of beef. As previously stated, these are abnormal times, and methods which would have been severely condemned a few years ago may be the very best and safest methods we can follow at the present time. Our great effort must be to get human food from our bulky fodders by converting it into meat, with a minimum reduction of cereals for human consumption.

Ensilage Will Replace Roots.

An objection in the mind of many may be the fact that in the college experiment roots were used very liberally, whereas on many farms roots are not largely grown owing to the labor involved. This is a perfectly legitimate objection, but judging from experience silage can be made to take the place of roots to a very large extent at least. In addition to this, the hay fed the college steers was mixed timothy and clover and contained too much timothy to be really satisfactory for cattle feeding. With a good quality allowance of silage there is every reason to believe that results quite equal to the college results can be obtained. The experiment emphasizes the great importance of clover, alfalfa and silage on the farms of this Province.

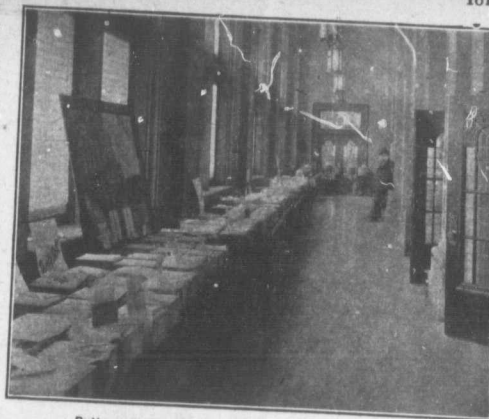
Grade Cow Makes 22,514 Lbs. Milk

A B.C. Record That Is Hard To Beat

T. A. F. Wiancko, Provincial Dairy Instructor.

ON February 5th, "Dairymaid," a grade Holstein cow, owned by Ed. Davis, of the Delta Cow Testing Association, completed her year's work with a credit of 22,514 lbs. milk and 905.3 lbs. fat, making her the champion cow for the year. "Dairymaid" has a previous record under a different owner, extending from Dec. 6th, 1915, to Dec. 4th, 1916, of 13,992 lbs. milk, and 515.1 lbs. fat, being for first prize in her association in 1916, the "Lady Bountiful," owned by A. D. Paterson, Ladner, B.C., whose production was 13,027 lbs. milk and 515.4 lbs. fat.

"Dairymaid," up until the time she became the property of Mr. Davis, early in 1917, never had a chance to demonstrate fully her dairy capacity. During previous years she was more used to being under in the rain and snow during fall and winter, and barked at by dogs, and, in general, being left to look after herself. Even under such conditions she all her inherent milk-making capacity, and turned out. Her feed bill during 1916 amounted to \$50.95, of which \$20 was for grain and mill feeds, the balance, \$30.85, being for hay, roots, pasture, etc. Her



Butter and Cheese on Exhibit in the Fort Garry Hotel. The exhibits from three provinces were a feature of the competition in connection with the annual convention of the Manitoba Dairyman's Association, held in the Fort Garry Hotel, Winnipeg, this month. The two illustrations on this page speak for the interest taken in dairying in the prairie provinces.

biggest milk yield for one day was 45.5 lbs., and her greatest yield of butterfat in one month was 57.1 lbs. During the six months, May to October, she received only good pasture. The following are the items of food costs: Hay, \$15.75; roots, \$7.50; chop, \$16.15; pasture, \$13; bran, \$5.30; silage, \$9; and shorts, \$1.50; making a total cost of \$67.55.

Her best day's milk was 76.5 lbs., and her best month's fat production was 99.6 lbs. She was milked three times per day during several months. The details of her production follow:

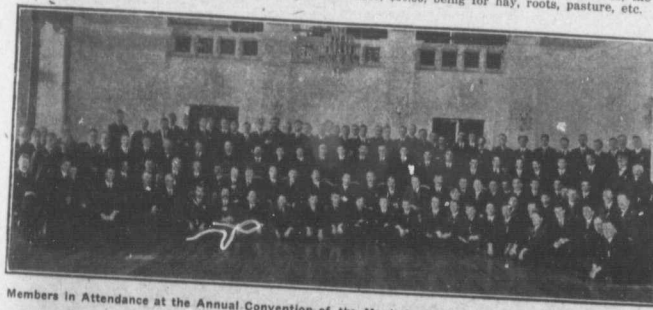
Testing Period	Lbs. Milk Daily	Lbs. Milk	Test	Lbs. Butterfat
Feb. 6th to March 5th	73	1,971	4.0	78.8
to March 31st	76	1,976	3.7	73.1
to April 30th	74	2,224	3.2	71.9
to May 12th	64.3	779	4.2	30.1
to June 12th	76.5	3,371	4.2	99.6
to July 12th	75	2,015	3.5	74.5
to Aug. 12th	82	2,180	3.4	79.5
to Sept. 12th	67	1,457	3.6	69.3
to Oct. 12th	54	1,250	3.6	61.1
to Nov. 12th	47	1,205	4.0	57.0
to Dec. 12th	43.5	1,147	5.1	59.4
to Jan. 12, 1918	50.5	1,363	5.1	70.4
to Feb. 5th	47	1,128	5.0	56.4
Total		22,514		905.3

Loss Through Low Grade Seed Samples of Seed Will Be Tested Free at Ottawa

THE use of impure seed is often the cause of considerable loss. Last season an Ontario farmer sowed fax containing several wild mustard seeds per ounce. This farmer considered the use of this seed damaged his farm to the extent of several hundred dollars.

A Quebec farmer last spring sowed barley which a subsequent germination test showed to be of very low vitality. The result was that he not only lost his nurse crop and wasted good feed, but noxious weeds were enabled to multiply to such an extent lowered. Last season many fields had to be seeded otherwise lost its vitality. Grain is so scarce, and a crop failure means so much now that every reasonable use as seed, grain that is not of strong vitality. The information furnished as a result of a thorough test of a lot of seed enables one to use it with intelligence. Canadian grown red clover seed containing quite a large number of such seeds as lambsquarters, plantain and foxtail, might be preferable to imported seed containing only two or three seeds per ounce, if they were wild carrot, bindweed, or some of the other very objectionable weeds.

It is only when the weed seed content, vitality and other qualities of seed are known that an intelligent estimate of its seed value can be arrived at. Every lot of grain to be used as seed should be tested for germination now so that there will be plenty of time to locate a suitable supply, should the desired seed samples tested for purity or germination may send them free of charge up to 12 ounces in weight, in strong envelopes or cotton bags addressed to The Seed Commissioner, Ottawa.—Seed Branch, Ottawa.



Members in Attendance at the Annual Convention of the Manitoba Dairyman's Association, held in Winnipeg recently.