

Canada's Loss and New Zealand's Gain.

Mr. J. A. Ruddick, Superintendent of the Kingston, Ont., Dairy School, has accepted, as announced in our last issue, the Dairy Commissioner'ship of New Zealand. We congratulate Mr. Ruddick upon the honor which, as a Canadian, he has fairly earned, and upon the substantial stipend, some \$2,300, which, with transportation to his new sphere of labor, he is to receive. We regret his departure from Canada, and congratulate New Zealand upon securing his services. Quiet and unassuming, an indefatigable worker, an unceasing student, progressive but sagacious, thoroughly practical, and never carried away with fads, he has that staying, wearing quality that causes all he achieves to perpetuate itself. A native of Oxford Co., Ont., one of our best dairy districts, he in turn learned the cheese and butter making. Successful from the start, he soon became superintendent of the McPherson combination of sixty factories in Eastern Ontario; next became an instructor for the Eastern Dairywomen's Association, and then a member of Dominion Dairy Commissioner Robertson's staff, on which he did good service in the inauguration of winter buttermaking, as the maker of the famous 22,000 lb. cheese—the "Canadian mite"—for the Chicago World's Fair, as an instructor in most of the Provinces of Canada, and as superintendent of the Kingston Dairy School. At an early date he began contributing to the FARMER'S ADVOCATE on dairy subjects, and continued to do so with more or less regularity, as his public duties permitted, ever since. The reading public very soon discerned that he was no mere theorist, so that his writings have contributed very greatly to the successful upbuilding of Canadian dairying. He leaves Canada with the best wishes of a host of friends.

Western Ontario Cheese and Butter Makers' Association.

A directors' meeting of the Cheese and Butter Makers' Association was held at the Fraser House, London, on Saturday, Sept. 17. Members present: President, T. B. Miller; directors—G. E. Goodhand, John Brodie, E. Agur, James Morrison, T. D. Barry, and Secretary W. W. Brown. The business of the meeting was to ratify an agreement between the Association and the Cheese and Butter Makers' Association are: 1st, that cheesemakers have in the past allowed themselves to be held responsible for losses through defects in the cheese or butter, whether they were responsible or not, under which circumstances cheap makers were employed; 2nd, that patrons have not realized the necessity of supplying milk in the best possible condition; 3rd, that factory building surroundings and utensils are frequently unfit for the making of a first-class product; 4th, that the system that has been in vogue tends to discourage the better and more ambitious from engaging in the occupation of cheese and butter making; and 5th, that it has been decided by the cheesemakers and buttermakers in union to attempt to redress these grievances and protect themselves and each other from the injury and loss by the continuance of giving of such an unreasonable guarantee. By the agreement, the cheesemakers and buttermakers covenant with the Association, each for himself or herself, that if he or she at any time hereafter, within the Province of Ontario, for the space of three years from the date hereof, directly or indirectly, become bound as part of the term of their hiring as cheese or butter maker, agree to make good or repay any sum of money lost to their employer by reason of the inferior quality of cheese or butter, unless and so far only as such inferior quality may have been caused by the gross negligence of the maker of such cheese or butter, shall and will immediately pay to the Association the sum of two hundred dollars, as liquidated and as ascertained damages, to become part of the funds of the Association. The makers also agree to become bound for the result of his or her own gross negligence, the same being ascertained by the award of a board of arbitrators chosen—one by the employer, one by the employee, and said two choosing a third. This agreement is not to be binding until there are two hundred signatures.

An agreement to be used between the makers and factorymen was also adopted, and preparations are being made for the annual convention, to be held in Listowel, Ont., on 1st and 2nd of February, 1899.

The Richness of the Strippings.

It is a well-known fact that the strappings or last milk got from a cow at a particular milking is much richer in butter-fat than that first drawn. An experiment conducted some time ago at one of the American agricultural experiment stations gave the subjoined results. The figures given are percentages:

	Fat.	Solids.	Water.
First milk.....	1.31	11.83	88.17
Strippings.....	9.63	19.18	80.82
First quart.....	1.22	10.82	89.18
Last quart.....	8.48	17.24	82.76

It is worthy of note, however, that there is but little difference in the percentage of casein present in the first and last drawn milks.

The Late Romeo H. Stephens.

Mr. Romeo H. Stephens passed away at his home at Chambly, Que., on Sept. 13th. The deceased was the eldest son of the late Mr. Harrison Stephens, who amassed a vast fortune in Montreal. He was born at Missisquoi Bay in 1827. He attended Harvard University for several terms, returned to Montreal and entered into commercial pursuits. Mr. Stephens' name, however, is more particularly associated in the minds of many FARMER'S ADVOCATE readers as being intimately associated with the St. Lambert family of Jersey cattle. Mr. Harrison Stephens, his father, was the founder of that notable family, the foundation stock of which he imported in the name of his son, S. Sheldon Stephens, of Montreal. The importation was made in 1868 and consisted of two bulls—Defiance 196, bred at the Queen's Shaw Farm, and Victor Hugo 197, bred by J. D. Vealle, St. Clements, Jersey—besides fifteen of the best cows that money could purchase in England or on the Island of Jersey. In 1871 two more cows were imported and added to the herd, and a short time later Stoke Pogis 2238 was purchased by Mr. Romeo H. Stephens from his breeder, Peter Leclair, of Woonoskill, Vt., and also added to the herd. These animals composed the foundation stock of St. Lambert Jerseys. These cows and bulls were bred together at Mr. S. Sheldon Stephens' farm, and with one exception—Amelia—it was the descendants of these cows that were transferred to Romeo H. Stephens at St. Lambert, where they were first known as "St. Lamberts." From time to time the very choicest selections of Mr. S. Sheldon Stephens' herd were transferred to Mr. Romeo H. Stephens at St. Lambert, where they continued to be perpetuated for a number of years. Sales were being made from time to time from the herd, a number of choice animals being selected by Mr. Wm. Rolph, Markham, Ont., from whom was purchased the world-famed Mary Ann of St. Lambert, who in the hands of Valacey E. Fuller, of Oaklands, Ont., made herself and family so famous. The late Mr. Stephens was exceedingly popular among all classes. He was possessed of a warm-hearted, genial disposition, and enjoyed the reputation of being a prince of good fellows. In politics he was an ardent Conservative. He had been intimately associated with Sir John Macdonald, and he retained his allegiance to his party till his death. He was interred at the Mount Royal Cemetery, Montreal.

Fall Cheesemaking.

BY J. A. RUDDICK, SUPERINTENDENT KINGSTON DAIRY SCHOOL, JUST APPOINTED DAIRY COMMISSIONER FOR NEW ZEALAND.

It was the writer's intention to continue the series of articles in regular sequence, but it seems to be an opportune time to say something on the above topic.

Many makers get into trouble by trying to make their fall cheese, and spring cheese also, on a different plan from that which they make during the summer months. 'Tis true the process requires some modification when carried on in one factory from early spring to late fall, under the conditions which prevail in the average factory, and when the demands or circumstances of the market are taken into consideration. From the fact that the year's supply of cheese is practically all made in seven or eight months, it is evident that the first of the season's output will go into consumption at once, and may be cured more quickly, while as the season advances the stock on hand gradually accumulates until at the close of the manufacturing season there is supposed to be sufficient surplus to last the balance of the year. It is obvious, then, that the later made goods should be cured more slowly in order to be at their best when required for use.

In order to discuss this thing in a proper light we must consider first the character of the milk during the months as compared with other parts of the season. The general rule is that the cows are fresh in milk in the spring, going dry in the late fall or early winter. It follows, then, that the milk will contain the greatest percentage of fat at the close of the cheesemaking season, for it is a well-known fact that the milk gets gradually richer as the period of lactation advances. The difference in the quality of the milk at these seasons is usually as much as one per cent., and sometimes more; that is to say, if the milk averages 3.2 per cent. during the months of April or May, it will run as high as 4.2 or over during October and November.

As the percentage of fat in the milk increases, the curd made from it shows more and more tendency to retain moisture. It is this tendency which is the cause of "pasty" cheese, for pastiness is nothing more than an excess of moisture. "Pastiness" is one of the most common faults of fall cheese. To overcome the difficulty it is necessary to adopt some means of getting rid of this excess of moisture. It may be done by more hand-stirring of the curd, or the addition of more salt, or by raising the "cooking" temperature from one to three degrees.

Such curd does not stand hand-stirring without causing too much loss of fat and curd particles in the shape of "white whey"; we are limited in the amount of salt that may be used; therefore, the application of more heat would seem to be the best plan.

I would recommend that the cooking temperature be raised from one to three degrees as the

season advances and the percentage of fat is four per cent. and over. If the milk is "set" somewhat sweeter it will have more time to harden in the whey. Cheesemakers will find it of the greatest advantage if they study the relation of these things to the percentage of fat in the milk.

There are some factories where the conditions which I have mentioned are gradually changing. I refer to those where winter buttermaking is carried on and the cows are coming in at different seasons of the year. This has a tendency to equalize matters, and there is not the extreme range of variation in the percentage of fat in the milk. If the cheesemaker watches it closely the amount of fat will be his best guide in handling the curd to control moisture and regulate the salting, for it is the best indication of what the probable yield will be.

Certain undesirable feed flavors are liable to appear in the fall, particularly as it is more difficult to detect them on account of the low temperature of the milk. The party who weighs the milk should be more critical on that account. I have no method for treating milk tainted with turnips or other strong-flavored foods. There is only one successful way to deal with such milk, and that is to refuse it.

A temperature of 60-65 is probably the best for curing fall cheese. It is frequently allowed to go as low as 50, but there is danger at this point of developing a bitter flavor in the cheese.

Dairying as a Specialty in Farming.

BY D. W. WILLSON, OF ELGIN, ILLINOIS.

First.—The first advantage of dairying is that it takes less fertility from the soil than other branches of farming, sugarmaking alone excepted. Authorities differ, but the following figures are approximately correct, round numbers only being given. A ton of each product mentioned below takes fertilizing material from the soil as indicated by the figures:

Corn.....	\$5 00
Oats.....	7 50
Hay.....	6 00
Clover.....	9 00
Potatoes.....	3 00
Fat Oxen.....	12 00
Milk.....	2 50
Cheese.....	21 00
Butter.....	50

A ton of wheat takes \$7.00 out of the farm, and sells for less than \$16.00; a ton of butter takes 50c. worth of good from the farm, and sells for from \$400 to \$600. Comment is needless.

Second.—Butter is a condensed product. Nothing can be made on the farm which brings as much per pound. Farmers remote from market can send butter from the farm or creamery with the least possible expense. The dairyman can condense tons of fodder and crops grown on the farm into dairy products, and send them to market in compact and portable form.

Third.—Butter is a finished product. It is ready for the consumer, and it is the only finished product at the present time that can be sent from the farm. All other farm products are finished after leaving the farm.

Fourth.—Dairying brings a constant income. The man who raises grain, stock and other crops on the farm must wait until they are grown and ready for market; his income comes in a lump and he spends in the same way, and lives on credit the rest of the year.

Fifth.—Dairying furnishes constant and remunerative employment the year round, and much of the time wasted in waiting for other crops to grow is profitably employed in caring for the stock in dairy through this period.

Sixth.—The work on a dairy farm is better subdivided, and does not come with a rush as it does in other branches, giving the farmer and dairyman an opportunity to do the work better and more substantially than where he is compelled to do it rapidly.

Seventh.—There is no branch of farming in which skill and expertness pays as well as in dairying. To produce the best of dairy products requires something beside brawn. Brain must be used as well. The dairyman must learn to work out the problems of breeding and feeding of cattle and manufacturing and making a finished product, and for this brain as well as brawn he gets his pay in cold, hard cash.

Eighth.—The opportunities for success in dairying are illimitable. There is always room at the top; always room for the best product; and for no other product of the farm is the general public so willing to pay top prices as for high-grade dairy products.

Ninth.—Dairying tends to morality. You will always find the men on the dairy farm who are successful in that branch are more careful, humane, kind and gentle, because these elements pay in this line. Raisers and handlers of other stock generally are rough, coarse, and, many times, brutal. The cow is a great teacher of kindness and gentleness. She responds readily to these traits in her handling.

Tenth.—In no other branch of farming has there been as good progress in working the problems for success as in dairying. The Babcock test, the separator and the facilities for getting the most from your work have been developed very rapidly in the last twenty-five years.

Eleventh.—No other product of farming holds as steady in price for a series of years. Grain, stock and wool vary largely. As an illustration we quote