



Officers and Staff and Graduating Class, Guelph Dairy School, 1904.

the air is foul. In hot weather we always divide the night's milk into two or three cans, which assists in cooling. Of course we are compelled to use this system in the absence of a supply of ice or cold water, which I am sure would be a much better plan.

CHARLES STUART, Elgin Co., Ont.

#### KEEPS THE CAN CLEAN

We consider our plan of keeping milk an ideal one. The cows are put in a well ventilated stable, kept in good condition. Each cow has her own stall, which she is trained to know as hers. The stable is supplied with modern conveniences. Before commencing to milk, the udder and teats are wiped off with a soft cotton cloth, as dust and dirt will always adhere to the udder. Regularity in milking is observed. Milk as rapidly as possible in small pails, and then pour into the larger pails, arranged systematically on the milk shelf. As soon as the large pails are full, they are carried to the milk stand and allowed to cool for two hours before being strained into the can. This cooling process is to take the animal heat out of the milk. The milk can is emptied of whey as soon as returned from the factory and washed in hot water in which washing soda has been dissolved. It is then scalded with boiling hot water and set in the sun until night. It is then rinsed in cold water and taken to the milk stand ready to receive the milk.

PRISCILLA E. BUCHNER,  
Norfolk Co., Ont.

#### The Winners

Those awarded the prizes for the five best replies to our dairy census questions are: Albert Loucks, Hastings Co.; D. C. Cameron, Glengarry Co.; J. W. Bogart, Dundas Co.; J. T. Simmons, Norfolk Co., all of Ontario, and David N. Burpee, Sunbury Co.,

New Brunswick. These have been placed on the list for a year's subscription to *Canadian Good Housekeeping*.

#### How to Advance the Dairy Industry

By Prof. H. H. Dean, O.A.C., Guelph.

Canadian dairying must advance. It is impossible for it to stand still, and Canadians are too proud of the industry to allow it to recede.

#### How can advancement best be made?

1. By spreading education and intelligence among the masses of dairymen. There never was so much need for intelligent, well directed effort in dairying as at present. The basis of advancement is intelligence and sufficient of it to enable dairymen to overcome the various difficulties met with in the carrying out of practical operations on the farm and in the factory.

2. By improving the dairy herds until the cows average at least 6000 lbs. of milk or 250 lbs. of butter per cow. A great deal of interest is being manifested in the question of testing cows. This phase of the dairy business must receive more attention than has ever been given to it. It is the only rational system by which a man can select and surely improve his herd.

3. Alfalfa clover and corn are two feeds which deserve careful consideration at the hands of feeders who are studying the economical production of milk.

4. In caring for milk on the farm which is to be sent to creamery or cheesery it must be kept clean and then cooled quickly to a temperature of 60 to 65 degrees. This will give good raw material out of which the maker can manufacture a well-finished product.

5. Pasteurization in the manufacture of butter will tend to produce an article of more uniform flavor and better keeping quality. In cream-

gathering creameries the cream should be delivered in a sweet condition, so that it may be pasteurized, thus tending to eliminate the so-called "cream gathered" flavor of which dealers in Montreal and elsewhere complain. The substitution of the Babcock for the Oil-test would encourage patrons to send the cream sweet instead of holding it until sour, so as to get a high test.

6. Improvements in cold-storage facilities at the creameries and during transportation would improve the quality of Canadian export butter as delivered in the British markets.

7. In the cheese branch of the dairy industry, well-made cheese ripened at a uniform temperature of 40 to 50 degrees, would tend to improve the reputation of our cheese products, although it stands well at present in the markets of the world.

8. The preservation of all the milk solids in a palatable, digestible form appears to have been solved. If this proves to be entirely satisfactory, it means the saving of tons of the most valuable food products prepared by nature, or in any laboratory. Eventually, it will mean a revolution in our methods of dairying. Up to the present this phase of the question may be considered as being in an experimental stage, but it looks as if most of the difficulties had been overcome.

9. Finally, a study of the sciences, bacteriology and chemistry, as related to dairying, will prove of great service in the advancement of practical dairy work. The question of flavor in dairy products is very important. Half the value of cheese and butter depends upon flavor. Flavor depends largely upon bacteriological and chemical changes, hence a knowledge of these subjects is essential in the intelligent production and manufacture of dairy foods.