

CARE OF MILK ON THE FARM.

A. A. MCKENZIE, Dairy Instructor, Palmerston North.

CARE of milk on the farm is a matter of vital importance to the dairy industry. Almost all the defects in our cheese and butter are directly due to the lack of proper care of the raw material during and after milking.

One of the chief sources of trouble is found in unclean milking-machines. Complete instructions for their cleaning were recently issued by the Director of the Dairy Division, but a few special points may be dealt with here. It is a common belief that boiling is detrimental to the rubbers: this is not so—weekly boiling lengthens their life. Exhaustive tests have proved conclusively that it is an impossibility to keep milking-machines clean without boiling. Experiments have also proved that chemicals such as chloride of lime, &c., are of no use in so far as reducing bacteria is concerned.

In connection with the cleaning of milking-machines, I have often found the milk system clean and the vacuum neglected. On pointing this out to many dairymen it is found they had been of opinion that a foul vacuum system did not make its presence felt. This is not the case, and scores of instances could be given where the cause of unsound milk from certain farms was traced to the vacuum system. After a thorough system of cleaning was adopted all trouble disappeared.

Slimy milk, the bugbear of cheesemakers, has been traced to machines that were in bad condition, and any cheese-factory that has one or two slimy vats per week is losing more than one man's wages, as the consequent yield of cheese is materially reduced.

Many cans of milk that would otherwise be of good quality are badly contaminated by absorbing the smell of the shed and yard during the night. This is brought about by having the milk-stand on the sheltered end of the shed, which allows the prevailing wind to carry the objectionable smell direct to the milk. In many cases the milk-stand is practically within the yard. Milk-stands should be erected on the windward end of the shed, and well away from any yard smell. Where the yard is so constructed that it surrounds the shed there is only one remedy—namely, to place the milk-cans containing the milk on the cart and draw it out to clean surroundings. In instances where tried this procedure has immediately overcome the trouble. Any dairy-farmer can prove this for himself by leaving an open sample of milk in or about the yard overnight, setting another sample of the same milk in a wholesome atmosphere well away from any yard or other smell, and comparing the two lots in the morning. Both utensils must, of course, be equally clean beforehand.

A common practice is to have the evening's milk held overnight in cans almost full. The supplier who does so is courting trouble. With such a large quantity of milk it takes considerably longer to get rid of the animal-heat, and as germ-life thrives to a greater degree in milk of such temperature it naturally follows that it is sound sense to assist cooling as quickly as possible. Where it is possible to have a water cooler installed, this is advisable. The dairyman will soon