

the cream from the different creameries to the factory. Where you have a large central factory it makes a greater bulk of butter of a uniform quality. In clause 7, line 23, I would strike out the words "New Zealand Creamery." Clauses 8, 9, and 10 I think are unnecessary. Factory managers are the people to take cognisance of the cases provided for; there are rules provided for such cases. As to clause 11, that might be left in the hands of the Inspector. Clause 12 I will pass. With regard to clause 13 I would ask whether that is not provided for by the Adulterations Prevention Act. As to clause 14, subsections (1) and (2), I think they are unnecessary. I do not think they would be workable. I would strike all out down to 17. At Taitapu, if the milk is not up to the mark, it is forfeited.

12. *The Chairman.*] Have you anything to say generally as to the dairying industry?—The collapse of the potato and onion trade has almost ruined a number of small farmers, men who have not sufficient capital or sufficient land to keep sheep on. I feel quite certain that the adoption of the factory system will be a panacea for the evils that might be expected to arise from that cause. Land has fallen considerably in value. I feel confident that the general adoption of the factory system will restore the value of the land to what it was before the collapse of those crops. It is rapidly doing so now; farmers are even now netting from £10 to £13 a cow where factories have been established.

13. *Mr. Lawry.*] That is not including skim milk?—We may put that down at another £1 a cow. The Taitapu Factory is worked on the co-operative principle. Every man gets the full value of his milk. It is tested for cream four times a month, and oftener if thought necessary. At the end of the month the cream-averages are added together. As there is from 30 to 40 per cent. of butter-fat in the cream they take the mean—36—that is, the mean as near as practicable; they multiply the four tests by the fourth of 36—that is, 9—which gives the amount of butter-fat; a further test is to multiply the quantity of milk supplied during the month by the percentage of butter-fat, which should give the exact amount of butter they should receive. They have a further test still; they can test these figures with the churn, and if the churn-butter does not tally with them there is something wrong. I have seen some returns showing the amounts given for the same quantity of milk according to the greater or less percentage of butter-fat it contains. One man receives £49, another for an equal quantity receives £56, owing to the greater percentage of butter-fat; so that the farmer gets absolutely the exact value of his milk. One great value of the factory system is the encouragement it gives to the breeding of dairy cows, and better feeding. Another advantage is that you can generally get 1lb. of butter from 24lb. of milk, whereas under the old system it took 33lb. of milk, or three gallons. Then, factory butter invariably fetches 2d., sometimes 3d., more than dairy-made butter; thus you find that the factory system has an advantage of at least 30 per cent. over the old system.

14. The old system would be better for the calves?—Not a bit better; separated milk mixed with a little linseed mucilage is just as good.

15. Have you ever taken into consideration which is the best breed of cows to keep?—On good land there is no better breed than the ordinary best cows of the country with a good shorthorn bull from a milking strain—that is, for land like that of Canterbury. On lighter lands the Ayrshire and its crosses are best. Another advantage in the shorthorn is that the animals when not fit for the dairy make more for beef.

16. Then, your experience has led you to the belief that a man to be successful at dairying must breed his cattle?—He must breed them up. The ordinary common cows of the country will average about 400 gallons per annum. In the Old Country selected cows give as much as 700 gallons—600 gallons would be a very good yield.

17. *The Chairman.*] Do you think this Bill will help the industry?—Yes; so far as branding is concerned I think it will do good; but I think there is a great deal in the Bill that might be very well relegated to the factory owners themselves.

18. What is your opinion of the prospects of the Canterbury dairying?—I think, to use a common phrase, if we get our factory system completely developed it will make Canterbury "boom."

19. Has your experience of the factory system been such as to enable you to say whether they get sufficient milk to make their operations successful?—At first there might have been some little difficulty; but judging by the result of experience at Taitapu they get enough, and the quantity is increasing. They commenced with a moderate amount. People who opposed them at first are now joining them.

20. *Mr. Lawry.*] Have you experienced the difficulty of getting milkers?—If you have to employ milkers it is not easy to get good ones. Dairy farms succeed best where the milking is done by the members of the family.

21. That might have an important influence in the direction of keeping families together?—Yes, that is so.

22. Have you seen anything of milking machines?—I know of one that is said to work very well—the Nicholson and Gray, of Stranraer, Scotland. There is a set of these mechanical milkers at work at Bodalla, New South Wales. The manager, Mr. L. W. Grierson, speaks well of the machines, and thinks that they are destined to revolutionise the dairy industry in the colony. From what I have heard of this machine from other sources they are still capable of improvement.

23. *Mr. Wright.*] Have you any suggestions to offer in connection with the transport of butter from the factory or dairy to the ship, and the necessary means to keep it from being spoilt in transit?—In our central factory we propose to have a cool chamber, so that we shall be able to run the butter from the factory on board ship. The Harbour Board has a cool chamber at Lyttelton, but it does not seem to be used as much as it might be. Every large factory ought to have the means for cooling; that is why we are so anxious to get large factories with all the best appliances.