

101. *Mr. Duncan.*] You might as well state the proper temperature?—From 32° to 35°.

102. *The Chairman.*] It would require ventilation?—Ventilation in that case might not be so desirable. If kept at the temperature I have mentioned, I do not see that much ventilation would be required. Cheese and butter could not be kept in the same cool-chamber, because to keep cheese at the temperature I have stated would simply make them almost useless—that is to say, the cheese would become very tallowy, and in many cases would incline to burst.

103. *Mr. Pinkerton.*] To put cheese in the same chamber as the butter will injuriously affect the butter?—Yes; to put them in the same chamber would injuriously affect one or the other. If you put butter into a cool-chamber with cheese, and keep the temperature down to what is desirable for the butter, you would spoil the cheese; and if you keep up a high rate of temperature for the cheese, you would spoil the butter by too great a heat.

104. What suggestion would you make for the purpose of carrying butter and cheese? Would you have them carried in separate chambers?—Yes, we require separate chambers, kept at temperatures best suited to the produce: that is all that is possible to be done, and that ought to be done.

105. Would it be necessary to freeze the butter before being put in a cool-chamber?—No; it is necessary that the butter should be fairly cool, and kept cool during the voyage.

106. *Mr. Tanner.*] Did I understand you to say that butter should never be exposed to a freezing temperature?—No, I did not say that butter should never be exposed to a freezing temperature.

107. It should never be so low as 32°?—It should never be so low as to freeze it. No butter will freeze at 32°.

108. *The Chairman.*] Leaving the subject of butter and cheese, have you contemplated the possibility of manufacturing margarine and imitations of butter which are now finding a large sale at Home? Have you given that any consideration?—Yes, I have given that consideration; and, of course, I think that the manufacture of margarine in New Zealand will not be resorted to at least for a few years to come; but it is necessary that we should be on our guard and give an unceasing and relentless opposition to the manufacture and exportation of spurious dairy produce. The manufacture and exportation of margarine would simply ruin the dairying industry here.

109. Why so?—It would simply cripple the industry, because the margarine would be coloured and sold for butter, and butter would be adulterated with more or less margarine, to the detriment of honest goods. It is hard enough for us to compete with the other countries and build up an assured trade by furnishing honest goods; but if we resort to sending perhaps hundreds of tons of disguised foreign fat, costing the manufacturers only 3d. to 5d. per pound, and so ruin our reputation, profitable butter-making on honest principles would be impossible.

110. Are you aware where margarine comes from?—Principally from Holland.

111. And from Denmark?—Yes; but very little of it comes from Denmark.

112. It does come from Denmark?—Very little of it.

113. And the best butter comes from Denmark, and fetches the highest prices?—Yes; the butter that dominates the English market just now is Danish butter.

114. Do you not think it would be possible to utilise fatty products in the country, such as margarine?—I think that it can be done by making oleo. I think that can be done very well.

115. Would it be difficult of undertaking?—No; it is only the more oily part of beef fat pressed out at a low temperature, or when the stearine crystallizes.

116. Would it give much employment, or be the means of getting a larger price for the fat?—It would not give much employment, but it would be the means of getting double the price for the fat.

117. *Mr. Duncan.*] What is oleo principally used for?—It is principally used for the making of margarine, or imitation butter. You can see that in Holland the dairying industry is practically ruined by the manufacture of margarine. In Denmark the laws regulating the manufacture, sale, or exportation of margarine are very severe, and are carried out with great vigilance. I think exportation is a contravention of the laws, and a margarine manufactory must only manufacture margarine pure and simple. No milk, or cream, or butter is allowed to be bought, supplied, or sent to any margarine factory, which prevents them from adulteration. In that way the population of Denmark is protected from imposture, and the makers of pure butter from dishonest competition. I think that our distance from the Home market, and the high transit and other charges, would be too great to warrant us going in for the manufacture of margarine. It would simply stop a lot of trade in honest goods, that would otherwise be carried on at a great profit to the colony. In the New York State, during the years 1888 or 1889, they had completely to stop the manufacture of margarine. They started to mix it in their cheese and other products, and it was largely stopping the manufacture and consumption of the sterling article. My object would be this: To guard the reputation of New Zealand as far as possible in the manufacture of pure dairy-produce of the highest quality, and I think that is the only possible way we have of making a history for ourselves in the English market in the face of our present strong competition, and of rearing up a trade of ever-increasing dimensions. That is my honest opinion on the matter.

Statement by Mr. Sawers.

The first and, to my mind, the most essential recommendation I have to make to this Committee for the speedy and successful development of the dairying industry is that as soon as possible more dairy factories should be established. I venture to say that, as quickly as co-operative dairying is established, just as quickly will the success of the industry follow. It must be quite obvious to all that if ever the trade in dairy-produce is to be of the desired commercial value to the colony factories must be established. It does not appear to me that it is possible, in the face of such strong competition, for us to make a history for our dairy-products and build up a trade of ever-increasing dimensions by means of home dairying, or, every farmer his own maker. While an extensive system of individual dairying is carried on, the anticipated results will never be attained; and likewise by