

Melbourne to London had a much better arrangement, and had special provision for regulating the temperature of the butter-chamber by an independent supply of cold air. He attributes the superior price given for the Victorian butter to this circumstance alone. He is not sure, but rather thinks that in the new freight-steamers being prepared for New Zealand this arrangement is made.

121. *The Chairman.*] Do you know the system adopted for the carriage of butter and such kind of products by railway in Victoria or in the Australian Colonies?—I observe from the *Sydney Mail* newspaper of the 25th July that they have just introduced a new refrigerating-car into the New South Wales railways for the carriage of fresh meat. The principle of the car is analagous to our own car, with this addition: that they have a partition in the middle of the car. In this partition they place blocks of ice. Similarly at each end of the car they place blocks of ice. This expedient enables them to carry fresh meat in the semi-tropical climate of New South Wales for hundreds of miles without deterioration.

122. Can you tell us what would be the average temperature of the cool-cars you mention as being used in New Zealand?—I made that inquiry of our officers, but they cannot tell me the difference between the temperature inside the ventilated car and the exterior of it.

123. Would the construction of a car such as they have on the New South Wales railways be an expensive matter?—Oh, not at all. It could be applied to our cars with a little adjustment; but of course it would add very much to the expense, because I also ascertained this morning from the Gear Company that the cost of ice is 2d. a pound. Of course, in larger quantities the cost would be less. In the car that I refer to as just introduced on the New South Wales railways there is placed 6cwt. of ice in each partition of the car.

124. It would not require a greater degree of coolness for the carriage of butter than that required for the carriage of fresh meat?—Not quite so much; it would be, I think, very considerably less.

125. So that the chief cost to the department would be the construction of the cars?—Yes; and, of course, the attention required to replace the ice, in addition to its cost.

126. Can you give us an idea what the additional charge would be?—I could not give you any reliable information. I do not think it is necessary in our climate, even on the hottest day, to cool by ice. I believe the ventilating arrangement I have already referred to is quite adequate to keep the butter at a temperature that will not deteriorate it. There might be damage if the van was standing during a summer day, but in running the fresh air goes through it, and, as the train goes round curves at different parts of the line, the sun and wind play upon the car pretty uniformly. If it stood in the station-yard with the sun beating on one particular point for hours, then the car would get intensely heated up.

127. It is stated that great difficulty is experienced by shippers of butter owing to the insufficient accommodation provided by the department at wayside stations?—I am not aware of that. If we get intimation that butter is coming we send a car to suit. We do not send the ventilated cars on the mere chance of picking up butter. If there is an order for butter to be delivered at any particular place we take care that we have the necessary accommodation.

128. On receipt of due notice the department always provides one of these cool-cars for the carriage of butter?—Yes. The minimum quantity we take is 4 tons; we would not provide a ventilated car for half a ton. We could not be supposed to run one of these cars through the distance with so small a lot. The minimum on the reduced rate is 4 tons.

129. Would it be possible for the department to run night-trains during seasons of hot weather?—It would if there was sufficient inducement.

130. What tonnage would warrant the department in running night-trains?—Fifty tons.

131. Then, we understand that if the butter-producers at Taranaki arrange with you they could have night-trains to run through?—Yes.

132. Would it be possible for your department to make an arrangement with the Manawatu Railway Company to bring the butter right through?—I cannot say. I wish to point out to the Committee this: that it takes about fifteen hours to run through from New Plymouth to Wellington, and, necessarily, in the summer time there must be a great many of the hours within which even a night-train would be exposed to the heat of the day. Supposing we started from New Plymouth, say, at 7 o'clock at night we could not deliver the butter before 10 or 11 o'clock next day; and, unless there were very smart despatch, the heat of the day would be up before the butter was in the ship.

133. *Mr. Marchant.*] Are the van-cars you speak of the same as you use for meat?—Yes, the same cars.

134. You were in communication, I think, with some patentees in America last year on the subject of cars cooled by the ammonia process?—Yes.

135. You remember my communicating with you on the subject?—Yes.

136. Did you get any satisfactory information?—No. We asked the Agent-General to communicate with that company, which he says he did. The company sent out a prospectus as to what they were going to do. We went as far as to intimate that we would order their apparatus. They then replied that they were not in a position to supply a special ammonia apparatus, but whenever they were they would inform us. We never heard any more about it. It was merely a prospectus: I do not think the company was carried on.

137. Would it be possible for the department to provide anything in the shape of cool-storage at the ports?—It would be quite possible. Speaking of the Taranaki trade, I think it would be the business of the Harbour Board here to have a small portion of their store converted into a cool-chamber. It could very easily be done, and they could get cool air from the refrigerating company's works here. I think it is an essential point in the safe transit of butter from New Plymouth to ship at Wellington that provision should be made in Wellington to put the butter immediately it arrives by train into a cool-chamber.

138. A question was asked of Mr. Ferguson, Secretary to the Harbour Board, yesterday as