

109. In wet weather there would be more danger, I suppose?—In wet weather the rail is at its best, but in slight rain, fog, or mist the rail becomes greasy, and that would make the brakes still more dangerous in Auckland.

110. *Hon. Mr. R. McKenzie.*] You were a member of the Royal Commission that inquired into the Auckland tramway system?—Yes.

111. And you made a recommendation that the brake system was inefficient?—Yes.

112. And that more powerful brakes should be put on the Auckland tram-cars?—Yes.

113. Do you know whether anything has been done since?—I understand two brakes have been put on for testing purposes.

114. What margin of safety have you on your Brooklyn incline, 6 to 1 or 5 to 1—I mean, the excess power more than you require?—We had four small cars which we ran to Brooklyn with 25-horse-power motors; but we found they got rather warm running up there, and we put in 40-horse-power motors.

115. So that you have 40-horse-power motors where 15's perhaps would do?—No, 25's.

116. But there was no margin of safety allowed in the 25-horse-power?—The 25-horse-power used to get rather warm.

117. What margin of safety have you in your brake-power? You said in answer to a question that it did not matter what weight the car was loaded up with, it did not have any effect on the power, and I want to prove that it would have an effect on the power of the brakes or the power to control the car. If you double the load you reduce the brake-power by one-half?—In the test I quoted to you with the double-deck car—

118. I am not referring to the test; I am referring to the ordinary working of the system. Supposing you are taking up 100 or fifty passengers in the car, you have the brake-power to keep the car under control properly with that load; but if you had 300 passengers you would not have the same control?—We have tried cars for the Public Works Department running up to Brooklyn with a weight in them equal to a load and a half of passengers.

119. No doubt you would think that margin of safety would be sufficient, but supposing your magnetic brake would not act?—All our cars passed for use on the Brooklyn route could be pulled up on the Brooklyn hill certainly with a load equal to a double load.

120. On your Brooklyn section the number of passengers you can carry on the tram is controlled?—Yes.

121. You cannot carry any more without the authority of the Governor in Council?—No.

122. And there is nothing more in this Bill, is there, than there is in the Order in Council limiting the number of passengers you can carry on the Brooklyn section?—No.

123. You know College Hill, Auckland?—Yes.

124. Do you know the grade there?—I think it is about 1 in 12.

125. And Parnell Rise?—That is about 1 in 9.

126. And Kyber Pass Road—that is very steep, is it not?—Yes, but I do not know what the grade is.

127. Do you consider that with a greasy rail the present system of brakes in Auckland shows a sufficient margin of safety on those inclines?—If their brakes were in thorough good order, and the track brake was applied at the top of the hill, and the motorman was careful in running the car down, I think it would be all right.

128. But without all those qualifications, what would be the position then?—If he did not apply his track brake at the top of the hill he would be very seriously handicapped, because the track brake takes a long time to put on, and during that time the car is gaining speed all the time.

129. But the track brake is really an emergency brake, is it not?—Well, their track brake cannot be used as an emergency brake; it takes too long to put on.

130. Take your track brake in Wellington—it is used for emergency purposes—it is not used for ordinary purposes?—Yes. One great point about a brake is that the brake you use for emergency should be used in ordinary service, because if you have a brake suitable for both purposes the motorman in the case of an emergency instinctively does the right thing. For service speed you put your brake on slowly, but in an emergency you would swing the brake round rapidly.

131. In answer to Mr. Hogan you said that you thought the ordinary Corporation could control the tramways as well as anybody else. Is that your opinion?—It is my opinion that every municipal body should be able to deal with their own tramways and their own affairs.

132. In a proper manner?—Yes.

133. Do you know if the Wellington City Council employs an Inspector of Nuisances?—Yes, I think so.

134. And why is it necessary to keep such an Inspector—is it because everybody keeps his back yard clean without inspection?—I do not know.

135. You have stated that if the number of your passengers were controlled or limited you would have to raise the fares from 30 to 50 per cent.?—Yes.

136. Has the Public Works Department in any way interfered with the number of passengers you should carry on the cars?—No, except on the Brooklyn section.

137. Anywhere else you can carry as many as you like?—Yes.

138. And the officers of the Department have never said anything about it?—No.

139. Going back to the Auckland system, would not this be the position: that it is either license or no-license; that the Government must either give them a license or stop them altogether—there is no intermediate course?—I do not know what the powers are.

140. I might explain that since you reported, as one of the Royal Commissioners, we have been perfectly helpless in the matter except to stop them running altogether, and that would be an extreme step to take?—Have you not got powers under the Public Works Act?