

36. It was known then that you were considering the question of new brakes?—That is so.

37. How many passengers do you carry per annum?—In the neighbourhood of thirty million.

38. *Hon. Mr. R. McKenzie.* What kind of magnetic brake is generally used on the tramway systems?—There is the Newell brake and the Thomson-Houston brake.

39. The Newell brake is manufactured in Pittsburg?—I think it is manufactured in more than one place.

40. Do you know whether it is a fact that the Pittsburg tramway system was first installed with only magnetic brakes, and afterwards replaced by air brakes?—I do not.

41. Did you ever apply to the Public Works Department for permission to install air brakes on your system in Auckland?—Yes.

42. When?—In a letter the chairman wrote to the Department in January or February, 1909, I think. It certainly asked for permission to install the brakes on two cars with a view to the whole of the cars being fitted.

43. That was for experimental purposes?—Yes. Might I refer to my file? On the 21st January, 1909, a letter was sent to the Under-Secretary of the Department by the chairman of the company, who was then in Auckland, asking for permission to substitute on two cars in Auckland the pneumatic brake for the present wheel-brake then in use. The letter reads as follows: "Wellington, 21st January, 1909.—The Under-Secretary, Department of Public Works, Wellington.—SIR,—Referring to the interview which I had with you and Mr. Holmes, the Engineer-in-Chief, at Wellington to-day, I now beg, on behalf of the Auckland Electric Tramways Company (Limited), to apply for permission to substitute on two of the cars now in use in Auckland the pneumatic brake for the wheel-brake now in use. The form of pneumatic brake proposed to be used is shown in detail in the drawings which I left with the Engineer-in-Chief. The company is desirous of meeting the requirements of your Department in every possible and reasonable way, and the company recognises that it is in the interests of the public, which is represented and safeguarded by your Department, and of the company itself, that the best and safest form of brake should be used. What is the best and safest form of brake is a matter upon which there has been a great deal of controversy in all parts of the world where electric tramways are used, and no definite conclusion seems ever to have been arrived at. The company is advised by its technical advisers in England to adopt the pneumatic brake in conjunction with the track brake now in use in Auckland; and it is suggested that the pneumatic brake should be tried upon two of the cars in Auckland—namely, one bogie car and one four-wheeled car—and that the question of the adoption of this or some other form of brake on all the cars should be considered in the light of the result of the trial. The two pneumatic brakes with which it is proposed to equip the two cars in question are now in transit, and are expected to arrive in Auckland shortly. I have now, therefore, to ask for the approval and permission of the Department to the use of the pneumatic brakes upon the two cars as above indicated for a sufficiently long period to ascertain whether such brakes will be satisfactory in Auckland. With regard to the suggestion of Mr. Holmes that a pneumatic track brake should be installed on one or two cars for experimental purposes, I am not able to say at the present time whether this is feasible, but upon my return to London in about two months I will have full inquiries made into the practicableness of the suggestion, with a view to its adoption. You and the Engineer-in-Chief will remember that at the interview referred to reference was made to the five cars now under construction by the company to which your Department has so far withheld its approval, because of the fact that the cars are fitted with the same brakes only as the other cars in use in Auckland; and you and Mr. Holmes were good enough to say that you would consider the company's application to have these cars approved. I may perhaps be permitted to repeat that the trucks and brake equipment for the cars in question were constructed before any question arose about the brakes, that in the company's view the brakes are efficient, and that it is not contemplated to use these five cars for the purpose of increasing the quantity of rolling-stock to be actually run on the tramways at any particular time, but that the cars are required in order to facilitate the repairing of any cars which may from time to time require to be repaired. The company hopes that upon full consideration of the matter your Department will see its way to approve the five cars in question. Of course, when the form of brake to be used has been finally determined these five cars will be fitted with that form of brake, as well as the other cars that are now being used by the company. Will you kindly address your reply to the care of Messrs. Bell, Gully, Bell, and Myers?—I have, &c., C. G. TEGETMEIER, Chairman of Directors of the Auckland Electric Tramways Company (Limited)." The following reply, dated 4th February, was received: "SIR,—I duly received your letter of the 21st ultimo, asking permission to equip two of the company's cars with the pneumatic brake so as to test its efficiency and suitability for adoption on the rolling-stock used on the above tramways, and, in reply, have to state that the Department has no objection to a wheel-brake operated by compressed air being installed, provided that no delay takes place in making the installation. I should be glad to learn the numbers of the two cars, and also to receive periodical reports as to the manner in which the brake is working. . . . —H. J. H. BLOW, Under-Secretary."

44. I understood you to say a while ago that the Department refused to give you permission to install the air brake?—No, I did not say that. May I add that up to a point experiments were made with two sets, and further experiments were arranged to be made, but after my conversation with Mr. Holmes they decided that there would be no good purpose served by continuing the experiments.

45. Why?—I never asked why.

46. Who was there besides Mr. Holmes?—Mr. Holmes and the District Engineer, Mr. Wilson.

47. You never made any written application except the letter you read?—No.

48. You simply acted on the conversation you had with the Engineer-in-Chief?—That is so. I took it that application was made by the letter from the chairman of the company.