

the company say they are not satisfied that any particular brake in use at the present time is the best brake to employ, and they are making experiments to see which is the best and most suitable brake for the service.

62. Do you think it takes sixteen months to put about forty glass fronts on the cars?—I think they ought to be able to do about four cars every three weeks without disturbing the service. It takes rather a long time to get them fitted, as you have to retire a certain number of cars from the service during the time required for the alterations.

63. Do you think the motorman of an Auckland car has the same control over his car as a Wellington motorman has over a Wellington car?—No, I am absolutely sure he has not.

64. Were you at any of the tests that took place not long ago in Auckland?—Do you mean when the Commission was sitting?

65. Yes?—I was at every one of them.

66. Did you consider the tests satisfactory?—No.

67. And not calculated to increase the safety of passengers?—No.

68. *Mr. G. M. Thomson.*] Is it not a fact that the Inspector of Machinery has power to examine your machinery?—The Inspector of Machinery inspects the machinery in the power-house and the car-shed with a view to seeing that the machinery and all the moving parts of the machinery are safeguarded.

69. Have you a rule in Wellington as to the maximum number of passengers that may be carried?—Only on the Brooklyn line.

70. The passengers on the cars here cannot in any way interfere with the motorman—they are quite separate?—Yes, they are quite separate from the motorman in the whole of our cars. There is a door between the motorman and the people in the compartment on some cars, but on the later type of cars the motorman is entirely shut off. The passengers could not get round to the motorman unless they got on to the running-board.

71. Then I take it that the number of passengers can have no effect on the motorman—they cannot in any way crowd him?—No, not on our cars here.

72. Can you tell us why you did not consider the brakes satisfactory in the Auckland tests?—Principally due to the very bad upkeep of the brakes.

73. *Mr. Luke.*] How many systems of brakes have you got on your trams now—means of braking cars?—We have four means of braking cars.

74. Will you shortly describe them?—The first brake is the hand-brake, which works brake-blocks on the wheels; the second is the magnetic brake—this is composed of a track brake, which clings magnetically to the rails while the car is going along, while the action of the magnet being held back by this grip forces the brake-shoes on to the wheels. It is undoubtedly the most powerful brake that you can have. The next brake is formed by reversing the motors of the car and putting the controller around one notch. The real effect of that is that if the car was stationary it would tend to send the car back slowly. That is a brake that cannot be used when the car is going at any speed. The next and fourth brake is the electric brake, which is formed by making one of the motors into a dynamo and generating current which is forced round the other motor. This current reverses the other motor and tries to make it go the opposite way.

75. Then, as a matter of fact, you depend more particularly in the running on two brakes?—We depend in the ordinary running on two brakes—the hand-brake and the magnetic brake.

76. This magnetic brake puts a slipper on to the rail simultaneously with putting the shoes on to the wheel?—Yes.

77. Are the motormen instructed in the working of all these brakes?—Yes.

78. Do they get periodical reminders of their duties in regard to the brakes?—If we consider it necessary.

79. And is it your special practice to examine the brakes every time the cars come in?—The brakes are inspected every night.

80. And do you think that having the work controlled or inspected under this Bill will tend towards greater safety to the public?—I think we are sufficiently safeguarded at the present time.

81. In regard to the Inspector of Machinery, he only inspects the engines and boilers, and examines the machines in the car-sheds, and dynamos, to see that they are properly protected for the people getting round them?—Yes, that is so.

82. They do not pretend to examine the dynamos or generators?—Only as a fly-wheel.

83. Do you think, if the Government exercised larger powers of inspection, that it would instil into the minds of your motormen a greater sense of security than obtains at the present time?—I do not know.

84. If the Government inspected the cars, say, once a year or once in six months, do you think the motormen would rely any more on that inspection than upon the night inspection that you have at the present time?—Well, they are two different things altogether. The night inspection is for the purpose of seeing that everything is right with the brakes and for taking up any wear that there may be—adjusting the brakes, and fitting them for the next day.

85. And the motorman is cognisant of all that inspection?—The motorman knows it goes on although he is not present.

86. You are also the Tramways Manager as well as the Engineer?—Yes.

87. You have a mission to see that the interests of the Council and the interests of the public generally are safeguarded, and to look to the proper carrying-out of the undertaking?—Yes.

88. You have already said that the officials of the Department have been very reasonable men to deal with; but, in your opinion, do you think the position may be arrived at that we may have a less practical Minister, and officers who may not be so much impressed with helping the service, which might create some considerable drawbacks?—Exactly; I think that might occur.