

4. What is the outside limit, as far as high speed is concerned, in which you would give up the magnetic brake and turn to other means for stopping the car?—I do not think I should resort to other means in any case, but I should expect the magnetic brake to act up to any speed.

5. *Mr. O'Shea.*] What emergency do our motormen use under three miles an hour?—The second—that is, reversing the motors; and in my experience it has proved the means of avoiding accident.

*Mr. O'Shea.*—*Mr. Fitzgibbon* says the union is generally satisfied with the magnetic brake, and therefore the Council does not consider it necessary to call motormen's evidence on the matter unless the Commission desire it.

*Mr. Fitzgibbon.*—I appear simply to protect the motormen when evidence is given which we do not think correct, and which may be detrimental to the union.

*Mr. O'Shea* (to *Mr. Fitzgibbon*).—I understand the union are generally satisfied with the brakes?

*Mr. Myers.*—If a statement of this kind is made it should be given in the ordinary course as evidence, as I wish to have an opportunity of cross-examining upon it, as to what the attitude was on a certain date, what it is to-day, and why it has changed in the meantime; and I decline to be bound, as far as I am concerned, by statements made to the Commission in this way—as to what the present circumstances are.

*Mr. Fitzgibbon.*—The union is taking up a passive attitude in this matter.

*The Chairman.*—*Mr. O'Shea's* position is that the Council does not desire to call any further evidence unless the Commission wish to do so.

The Commission adjourned at 11.30 till 2 p.m.

The Commission resumed at 2 p.m.

RICHARD ROGERS HAWLEY, Motorman, called by *Mr. O'Shea*, and sworn.

1. *The Chairman.*] Do you remember coming down a declivity beyond a tunnel on the way to Seatoun? I was on the platform, and you were taking instructions from me. I signalled you to stop, and what did you do then?—I applied the magnetic brake as instructed. I gave the first notch, and was going to give the second notch when my hand came in contact with you. I then started to take up the hand-brake, and you moved back on to the rail. I did not mention the matter to you at the time.

2. The fact of your arm coming in contact with me retarded your movement in putting on the brake?—It prevented me from striking the notch clean, as I ought to have done. I came on to the second notch afterwards. In my opinion the car skidded slightly until I took up the hand-brake and the magnetic brake was released.

3. You attribute the failure of the magnetic brake on this occasion to the fact that you could not get on to the second notch as quickly as you wished to?—I did not say that the brake failed to act at all.

4. We have evidence before us that the brake did fail to act. You say the brake did not fail to act?—I cannot say that it was a straight-out failure, and under ordinary conditions I would have pulled up the car and could have made a fair stop. I have never before had a brake-failure under similar circumstances, and I have no actual knowledge of any brake-failures having taken place.

5. I thought you mentioned to me on the car that you had known the brake to fail in a similar way in the Brooklyn trials?—I said I had known it to flash. I never mentioned that it had failed. I do not call yesterday's occurrence a failure, seeing that the car took the brake as she ought to have taken it, although she flashed, which I ascertained from the controller.

*The Chairman.*—The witness's recollection of the incident hardly agrees with mine, as there was another stop that was made before, and he is probably confusing the two. His statement that he came on to the second notch too quickly hardly coincides with his statement just now, that he was retarded in doing so by coming in contact with me, but no doubt he was flurried under the circumstances.

*Mr. Beattie.*—For the information of the Chairman and others present, I might mention that I was standing in the front smoking-compartment of the car, immediately behind Motorman R. R. Hawley. From time to time Professor Scott gave signals for emergency stops to be made by Motorman Hawley, and I was taking time with a stop-watch. With regard to the incident in question, I saw the whole of the action, and wish to state that Motorman Hawley is under a misapprehension if he thinks his elbow or hand came in contact with Professor Scott, who was standing alongside him. On Professor Scott giving the order to make this stop Motorman Hawley swung the controller-handle round smartly, but neither his arm nor the controller-handle came in contact with Professor Scott.

SAMUEL BLACKLEY SWORN.

Examined by *Mr. Myers*: I am manager for Turnbull and Jones (Limited), and am an electrical engineer of sixteen years' standing. I have lived in Auckland for three years, and am well acquainted with the conditions of and surrounding the Auckland tramway system, and have paid particular attention thereto.

*Mr. Myers.*] You know that the company has at present a ratchet hand-brake and a track brake apart from the electric brake installed in the cars. Can you express an opinion upon the suitability of an air brake operating upon the wheels plus the track brake for that system?—For the Auckland conditions I should say that an improved form of air brake in combination with a track brake would be first-class in view of efficiency and safety.

At 2.30 p.m. the Commission decided to formally adjourn till 10 a.m. on the following day, Thursday, 5th May, 1910.