tion over 25 lb. results in loss of air through leakage without any corresponding advantage in holding-power. Assuming that the brake was operative throughout the whole of the train, and that the pressure was 80 lb. with a reduction of 30 lb., I consider that the brake should have held the train from half to three-quarters of an hour. I may state that since accident I have made a special test on an incline of 1 in 40 on a train of six vehicles, and in fifty minutes, on that incline of 1 in 40, all the brakes were released. They released by the natural leakage of the air from the tubes and reservoirs. These wagons were not attached to an engine, and the reduction was 35 lb. Copy of brake-test put in (Exhibit No. 37). All vehicles were picked at random—no selection. As showing a certain amount of light on this particular point, it may be of interest if I hand in tabulated statement of a trial made on New South Wales railways in 1901 (Exhibit No. 38). The particulars are published in a New South Wales parliamentary paper. In that test the train consisted of forty-nine vehicles and an engine. A certain number of the vehicles were fitted with pressure-gauges, so that the reduction in the air-pressure, due to leakage, could be observed. That train was set apart specially for the various brake-tests which were being carried out by a board of five experts appointed by Government. Grade, 1 in 30. It is therefore fair to assume that those vehicles had been specially prepared for test purposes. Everything would be in prime condition. It will be seen from the return I have put in that eighty-three minutes elapsed between the time that the engine was detached after applying brakes until the brakes became inoperative and the train began to move. If the hand-brakes on all the vehicles had been applied they would have been sufficient to hold the train, apart from Westinghouse brake. I should have put the whole lot down, but I admit that less than all would have held the train. On a grade of that kind with the engine detached and an element of uncertainty as to how soon the engines would return, I should have applied all the hand-brakes on the train as a matter of prudence—that is, on a grade of 1 in 36. An inspection of the couplings at an intermediate station is not necessary unless the couplings have been interfered with by shunting operations. Any portion of that train arriving at an intermediate station and not having been uncoupled at that station, it would not be necessary for the guard to make an inspection of those couplings at such intermediate station; but it is necessary and absolutely essential that the guard should, by means of the brake-test, satisfy himself that the brakes were in operation right through to the rear of the train. If he found that the brake readily applied on his signal and readily released on his signal right through to the van, he might then be satisfied that the train-pipe was properly connected and all the cocks opened. He would stand at the rear of the train, he would have the brakes put on and released, and he would see that they did apply and release by night as well as by day. He would have to satisfy himself by actually watching. The fact that the brake-blocks went on and released would satisfy him that the continuity of the train was unbroken. If one or more of the cocks were almost closed it would make a difference in that the brakes would not readily apply or readily release. If the guard was an experienced man he would readily see that. It is a duty cast on the guard to see that the train is properly coupled up when it has been disconnected. At a terminal station many of the vehicles put on are taken out of a siding, and may not be as perfect as those in a train which had left a terminal station. The guard is responsible for the proper coupling of the train, but he could satisfy himself by his assistants' assurance that the coupling is properly done. Then he tests the train as before described. I do not think it necessary that a train which has not been broken should be tested as to brakes being in order at every stopping-place. At every stopping-place where there is a train-examiner that examiner would examine every vehicle and its train-connections. There is no train-examiner at Ngatira or Putaruru. If it proves to be the fact that the cocks are interfered with at Ngatira, then it would be well to apply the brake-test there before the train proceeds. The matter of testing brakes at all intermediate stations will be earnestly considered by the officers of the Department. It would take rather more than a minute to make the test. I wish to have it placed on record that the alleged tampering with the cocks at Ngatira is news to the Department. It was not reported to the Department. Had we had that knowledge we would have taken steps to meet it, and now, having the knowledge, steps will be taken to meet the difficulty. Only cars in good running-order are placed on the track. The detailed examination made at a terminal station includes many more items than merely seeing that the brakes are properly opened and the brake-hoses properly coupled. An engine-driver uses the Westinghouse brake either to hold the train when entering a station or when descending a grade, and whenever necessary on emergency. The question of the driver's knowing how far back the brake is acting refers to when a train is standing, but when a train is running under ordinary conditions he would know whether the brakes had hold of the train or not. Even when entering a terminus like Auckland, a driver would not be worse off with the Westinghouse brake than before its introduction. Mamaku is the summit at an altitude of 1,884 ft. There is no train-examiner there. The train might not stop at Mamaku, but if it did stop there, there would be no brake-test there. We have a rule requiring drivers approaching a terminus to approach at such a speed only as would enable them to pull up with the hand-brakes only if necessary. The instructions at page 6 of the Appendix are certainly in operation. They have never been cancelled. It is true the instructions were in existence before the Westinghouse brake was installed. The "Notice to Enginemen" (Exhibit No. 18) is not in conflict with the Appendix. It is the fireman's duty to couple up. He is the responsible person. (Rule 192, page 81.) See also "Instructions to Firemen" (bottom of page 8). I submit the rule and instructions do not conflict. There is no reason why a driver with his own hand should do everything if he has a competent fireman to do it. The engineman satisfies himself under instruction at bottom of page 8 by the brake-test in conjunction with the guard. The couplings (Rule 192) include the hose-couplings. I have heard the evidence as to the stopping on the incline. I say the driver was perfectly justified in stopping if he suspected anything was wrong with his engine. The instructions on page 6 of Appendix, and Rule 231, Rule 269A, and Rule 213 also bear upon the matter. Rule 187 and Rule 117 all bear upon his