

7. When I speak of Government trains I am not speaking necessarily of express trains. What have you in mind—express trains or ordinary Government traffic?—Ordinary Government traffic. The banks are very narrow there—they are very little beyond the end of the sleepers.

8. Then as to the rails and the sleepers, what have you to say about those from the point of view of the Government running trains on the line?—We would have to run at a low speed on those lines. There are about five miles of 28 lb. rails.

9. Apart from the formation, is the track such as you would run ordinary Government trains on?—No.

10. Either the rails or the sleepers?—The rails would want to be replaced with heavier rails.

11. Would the present sleepers do?—Some of them would, but a lot would have to be taken out.

12. Did you notice any private crossings?—Yes, to the properties on one side.

13. What do you say about that in reference to a Government line?—Well, I do not think it would be at all satisfactory.

14. Will you express your opinion from the point of view of danger?—Yes. The railway is close to the boundary—some 20 ft. away—and I myself think it would be necessary to construct a road right alongside of it.

15. Do you mean to have a road alongside—on the other side of the rail, parallel with the railway?—Yes.

16. *Mr. Skerrett.*] This tramway-line has been used with Government rolling-stock for some thirty years?—Yes.

17. I am told that all sorts and varieties of trucks come up from Wellington on to this tramway-line. Do you happen to know whether there is any process of selection at Wellington?—No, I could not say.

18. *The Chairman.*] I understand you are District Engineer—you have nothing to do with the carrying of traffic?—No, nothing to do with the traffic.

19. *Mr. Skerrett.*] I suppose it is a fact that some of the railway-trucks would be of intrinsically greater weight than ought to be carried on 40 lb. rails at any speed?—Yes, that is so.

20. Do you know that on one occasion the Minister of Railways and the General Manager went over this line in a big railway-carriage—came up to Sanson in state?—Yes, I believe they did.

WELLINGTON, WEDNESDAY, 31ST MAY, 1916.

ROBERT WEST HOLMES sworn and examined. (No. 47.)

1. *Mr. Myers.*] You are Engineer-in-Chief of the Public Works Department for New Zealand?—Yes.

2. And I think you also hold some official position in connection with the Marine Department?—Marine Engineer of the Marine Department.

3. Is it part of your duty in these two capacities to have a knowledge of the rivers and harbours of New Zealand?—Only so far as any works that are brought under my notice are concerned, or are being dealt with by my Department.

4. *The Chairman.*] I suppose anything that the Government has to sanction would be submitted to you before sanctioning?—Yes.

5. *Mr. Myers.*] Have you a knowledge of the conditions of the Manawatu River?—Yes, a fair knowledge—not an extremely intimate knowledge.

6. You know that the channel at the mouth is a shifting channel?—Yes.

7. And that there is this sand bar which we have heard so much about?—Yes.

8. Can you say whether in your opinion the conditions of that river can be materially improved merely by dredging the channel inside the bar?—No, dredging the channel would be of no use without controlling-works.

9. When you speak of controlling-works, do you mean controlling-works in the river, or at the bar, or at both?—At the sides of the channel—wherever it is desired to deepen the water.

10. Does that apply to all rivers, or are you dealing particularly with the Manawatu?—Particularly with the Manawatu.

11. Why do you say that particularly with regard to the Manawatu?—Owing to the nature of its bed and the extreme width of the channel of the river, and also on account of the large amount of sand that is carried by the river, also on account of the loss of effect of the river currents, the total current being spread over a large area instead of being confined to a narrow channel.

12. So far as controlling-works are concerned, if I may call them so, in the channel of the river, is that a matter of great or small expense?—Great expense.

13. And what do you say about the necessity for work or operations at the bar?—Well, I have an idea that if the river is properly controlled inside, and down probably to some point between the general line of high- and low-water marks, that the depth over the bar would be maintained in a permanent position, and in consequence of that and the narrowing of the ordinary channel it would probably tend to permanently increase the depth. To construct any works on the bar itself would merely have the effect, as it has on all sandy coasts, of advancing the line of the foreshore, so that after the completion of the works the probability is that the conditions would be the same as at present—there would be no permanent improvement.

14. Would there be, in your opinion, an improvement if training-walls were erected?—Yes, just down to inside the bar, but not outside or on the bar.

15. *Mr. Williams.*] You would not propose any walls on the bar?—No.