8. The Committee has been informed that on the western route that data is not available, or what there is is imperfect: is that correct?—Not so far as I know.

9. That answer appears to imply that you are not quite sure as to the data available?—I know that trial surveys have been made of both routes. I have passed them through my hands in Auckland and sent them to Wellington.

10. Are you of opinion that the construction of the line on the western route would not cost

appreciably more than by the eastern route?—That is my opinion.

- 11. As to the cost of maintenance of the line when constructed, can you give the Committee an opinion upon that point?—That is rather a difficult question to answer. To tell what a line will look like when constructed and how it will stand is a difficult matter when one has only a trial survey to go on.
- 12. So-much bridging is required for each line. What would be the cost of maintenance of each in that case? Would there be any appreciable difference?-I should like the Committee to understand that I am not prepared to go into details of cost of maintenance on the two routes, for want of sufficient data.

13. You are not prepared to offer an opinion !—No.

14. Then, as to the class of country to be served, and the number of passengers and stock, and so on, that would be available for traffic, can you give the Committee any information in regard to that? How would one line compare with the other from these points of view?—I have not looked into the question of the traffic at all. It has not been my business to do so. I have been dealing with the questions of survey and construction. I believe that the matter of the prospects of the two routes has been looked into, but not by me.

- 15. How long have you been in that district ?—Two years and a half.
 16. You have, then, had an opportunity of acquiring a general knowledge of the features and characteristics of the district?—Yes.
- 17. Mr. Pearce. You are the District Engineer for this particular section of the railway?
- 18. You said there had been a trial survey made: who made that trial survey?—Several engineers were engaged on the trial surveys. There was a trial survey made of each route, and a good many engineers were engaged. The plans all went through my office.

19. The engineers were under your control?—Yes.

20. Was there not a detailed survey made of the eastern route?—Yes, to the 85th mile only. [Point indicated on map.]

21. Is it a fact that the sites for the stations were fixed on that portion?—Yes.

- 22. Has any work been done at all in the way of formation or anything of that kind on that portion?—No, none at all.
- 23. Do you think that the flying survey you have had made of the western route gives enough detail to enable you to state, as you stated just now, that there would be very little difference in cost as between the two routes !—I consider it sufficient for that.
- 24. You are sure of that, although you say it was only a flying survey !--It was a good trial survey, not a flying survey.
- 25. It gives you enough data, you think?--It is the test that is usually applied to different routes before you make a permanent survey.

26. It has been mentioned by another engineer that there is about a mile and a half or two

miles of slipping ground on this western route?—Yes.

- 27. What is your opinion of that?—There is a mile and a half of slip ground that is undoubtedly bad country to make a line through. It is between the Otamatea River and the Whakapirau Road.
- 28. You say you can form an estimate by the trial survey you have made. What is your estimate for making and maintaining the railway through this particular piece of country !--I am not prepared to deal with the question of maintenance. I do not consider the information before me is sufficient to enable me to do so.
- 29. I suppose that from this trial survey you know the amount of bridging that is to be done on each line?—I have seen the bridging.

30. What is your estimate of the cost of the bridging on the eastern route?--I have made no

estimate of the cost of bridging, per bridge.

31. I am asking for the total bridging !—I have made no estimate of the total bridging on either route. I have priced the work that we have done already, and have made an estimate so far as the permanent survey goes—a close estimate for each route—that is, to about the 85-mile peg on the eastern route and to 84 miles on the western route—and I have estimated the work beyond that, mile by mile, as closely as possible, judging by work that has previously passed through my hands. I have never been asked for a detailed estimate.

32. We are given to understand there is a large bridge on this line. Is this 84-mile point this side or the other side of Young's Point?—Yes, there is a large bridge there.

33. Does it include the bridge—Yes.

- 34. The 84 miles is over the bridge?—It is up to the bridge.
 35. You are not prepared, then, to give an estimate of the cost of that bridge?—I have formed an idea of what it will cost.
- 36. What is that idea?—It is not a detailed estimate. I think the bridge would cost £17,000, without the approaches.
- 37. Do you consider you are justified in saying the two routes would cost practically the same, on the flying survey you have made? You have only details of the first five or six miles out of eighteen !—I consider I am justified in doing so.
- 38. Mr. J. Duncan.] You have been two years and a half in the district, and in that time have become well acquainted with it?—Fairly well acquainted.