Mr. Rlair. 25th Nov., 1879.

- 11. The beach is on the westward of it, is it not?—Yes; it runs within a very short distance of the
 - 12. Do you know the population in the Waimea, Stafford Town, and Kumara District ?-No.

13. Is it a thickly-populated district?—Yes.

Hon. Mr. Gisborne.] We can get the extent of the population from the Registrar-General, according to the census.

14. Mr. Seddon.] Now, as an engineer, do you believe it would be preferable to have a branch or a loop line in a case of this kind, as a matter of public policy?—So far as the working of the line is concerned a loop is generally preferable to a branch, but it all depends on the length of the loop.

15. Yes; but I mean taking into consideration that one would go along the beach through unproductive country, and with no population, whilst, with the addition of six miles, the other would go through centres of population—through country that is settled. Taking this into consideration, which do you think would pay best, as a matter of public policy?—It all depends on what the future of the railway is to be: whether this line is intended to run eventually to Okarito or in that direction.

16. Provided with a population at Kumara, would it be advisable to take a line of railway to that

population?—It is all a question of traffic.

17. There are no engineering difficulties?—No, there are really no engineering difficulties; but, of course, the gradient of 1 in 50 is a comparatively serious thing.

18. The Chairman.] What is the original estimate of the cost of the line?—£220,000.

19. And what would be the difference in case of bringing it inland?—I have not made a detailed survey, but I fancy it would cost £8,000 per mile, including plant.

20. What is the line costing now per mile?—I do not know what the contracts are, but they

only include formation, not the railway complete.

21. At the Kapitea and Waimea there would be two very large bridges. Mr. O'Connor, the District Engineer for Westland, says, according to this report of 1877: "From 4 miles 60 chains to 12 miles 52 chains the line follows along the foot of terraces about 20 feet from the sea, passing over old gold-workings. The ground throughout this distance is rough, but there would be no heavy earthworks; and the only bridges worth mentioning would be those over the Waimea and Kapitea Creeks, each consisting of about three 40-feet spans, with small spans at ends." There would be no bridges going inland, would there?—You would have to cross the same rivers going inland.

22. Have you been along the Greenstone Road?—I have been along the road to Kumara.

23. Would there be any bridges there?—They would be very much smaller there than at

- the mouth.
- 24. What would be the source of traffic on this line from Hokitika to Greymouth?under any circumstances. It would be timber chiefly, and coal. Coal from Greymouth to Hokitika, and possibly timber from Hokitika to Greymouth, and general merchandise traffic between the

two places.

25. And also the passenger traffic between Greymouth and Hokitika?—Yes.

Charais no passenger traffic from the beach, is there?—No; the intermed 26. There is no passenger traffic from the beach, is there?—No; the intermediate passenger traffic

would be from Kumara to Stafford Town.

27. Are there coaches running there?—Yes, two coaches a day, carrying passengers.

28. Then you estimate these additional six miles would involve the expenditure of £48,000—that is, at £8,000 per mile?—Yes, something like that; but I think this portion of the line would be the most difficult. The country is pretty rough, and there would be some very sharp curves.

29. At any rate, the average for the six miles would be £8,000 per mile?—The maximum amount

to complete the loop would be £18,000?-Yes, something like that; assuming the branches were to

be made under any circumstance.

30. Taking all circumstances into consideration, would you not be in favour of making a loop line in lieu of having simply a branch to Kumara?—I think that if the two branches had been decided upon it would have thrown the balance of advantages in favour of making a loop; but this other branch to Kumara not being so easy of construction, this is not so apparent.

31. Hon. Mr. Gishorne.] Now, Mr. Blair, I want to have this matter put more clearly before me. Show me on the map which is Hokitika and which is Greymouth?—[Witness pointed out these places

on the map.

32. What would the cost of the railway be from Hokitika to Greymouth?—£220,000.
33. There are two other proposals besides the one to which this amount refers. One is One is to go from some place on the beach as far as Stafford Town. What survey have you got of that?—Nothing, except the reconnaissance survey, the plan of which I hold in my hand.

34. What is the estimated cost of that line?—It would cost about £8,000 per mile.

35. I want to impress on the Committee that there are three proposals altogether in reference to this railway; and now I want to know particulars of the cost (after making calculations).—The present line between the two places, a distance of eight miles, at £8,000 per mile, would be £64,000; the loop line, a distance of nineteen miles, would cost about £152,000; and the branches £72,000. Let us take it as it costs from Hokitika to Greymouth by beach. It would cost £220,000.

36. Very good. And supposing you had two branch lines?—The branches would be nine miles

Say, £80,000.

long. Say, £80,000.

37. With branch lines, then, the railway would really cost £300,000? Is not that it?—Yes.

38. Well, then, with the diversion or loop?—About £320,000.

39. But you have not had detailed surveys made, have you?—No. I think the first branch will be very heavy and the line a bad one, because Mr. O'Connor, who has given me a report on the subject, says, "Heavy side-cuttings—partially through gold-workings—in some places diversion will probably be required, to avoid curves sharper than 5 chains." He makes the minimum curves to to be 5 chains, which are very sharp.

40. As between the branch lines, then, and the diversion the difference in cost would be £20,000. The diversion would cost £20,000 more than the branch lines. Which do you think would pay

best ?—I would rather have the diversion than the two branch lines.