

Mr. Patterson, C.E.,
Continued.

12. *Hon. Major Richardson.*] What amount would it take to complete the Oreti line to Winton, on the plan already pursued, and what would be the probable duration of the part now completed, and of that part which would be formed in continuation?—I cannot state the cost of completing the line to Winton, with wooden rails. I believe the cost of the timber roadway was about £2,000 per mile, exclusive of formation and ballasting. The part already completed has, so far as the timber rails are concerned, been already almost entirely re-constructed, and has only been kept fit for use at great trouble and expense, by the substitution of new rails provided for other parts of the line.

13. Then, in fact, your estimate is for a new line, less the earthworks and bridges?—An entirely new system of roadway, but using the present sleepers so far as they are fit to be laid. The value of the available material already provided for the permanent way would amount to about £5,000.

14. *Hon. Mr. Holmes.*] Can you give an approximate estimate of the cost in money of the proposed new line from Invercargill to the Mataura, a distance of about thirty-five miles, uniform in gauge and quality with the Bluff Harbour Line?—I have been requested by the Provincial Government of Southland to proceed there, to give a report on that subject. I have only once travelled through that district, and on that occasion I did not make a special examination, with a view of forming any estimate; but from my general knowledge of the country, I should think that a railway of a class similar to the Bluff Harbour and Invercargill Line, would cost between £7,000 and £8,000 per mile, including a sum of £100 per mile for the purchase of land. My knowledge of the district is, however, very slight.

15. *Hon. Mr. Menzies.*] Do you think a railway of the substantial and expensive character of the Bluff Harbour and Invercargill Railway, would be necessary for the Mataura line, or would it be advisable to construct a less expensive and lighter line?—I should think that a railway of a lighter description might be sufficient to accommodate the requirements of that district. A railway somewhat similar to that which I have described for the completion of the Oreti Railway would cost about £1,500 per mile less.

16. Have you had any experience in the construction of narrow gauge railways—say 3 feet or 3½ feet?—I have had some experience of narrow gauge railways for mineral lines, not for passenger lines.

17. What would a line of 3½ feet gauge cost?—The difference of cost in such a country would be comparatively trifling; I suppose a light railway might be laid down at less cost, but I cannot say that it would sufficiently accommodate the district.

18. What would such a line cost if constructed for horse traffic?—A line with very light iron rails, and with other works of a corresponding description might be made for about £2,000 per mile, but I should look on it as money thrown away, because I do not think it would answer the purposes either of a road, or of a railway.

19. *Hon. Mr. Holmes.*] Do you include in your estimate of the Mataura Line, the rolling stock and stations necessary to work it?—I have included in my estimate an amount for stations, but not for rolling stock. The rolling stock by itself might cost about £10,000.

20. *Hon. Mr. Menzies.*] Can you inform the Committee what a metalled road would cost per mile from Mavis Bridge, (six miles from Invercargill) for twenty miles towards the Mataura?—Assuming that the stone required cannot be obtained nearer than the Green Hills on the Bluff Railway, I believe the cost of a good metalled road, would altogether amount to about £4,000 per mile. The metalling for the road would cost more than the permanent way of the railway. The high cost of the road being in consequence of the expense of conveying the stone from the quarry in Green Hills to the road. I estimate the cost of the stone at about £3,000 per mile.

21. *Hon. Mr. Miller.*] Are you of opinion that great inconvenience will arise if railways are constructed throughout the Colony with different gauges?—There will be great inconvenience from this cause, and eventually when it becomes necessary to connect the different lines great additional expense. The delay and inconvenience in carrying on the goods traffic between lines of different gauges are very great, and cause great additional expense. There is already a mixture of gauges in the Colony. The Canterbury gauge is 5 feet 3 inches; and Southland, 4 feet 8½ inches. On the Australian Continent the same objection occurs: the Queensland railways are being constructed on a gauge of 3 feet 6 inches; New South Wales, 4 feet 8½ inches; Victorian, 5 feet 3 inches. The Irish gauge is 5 feet 3 inches, and the Indian, 5 feet 6 inches. Some branch lines have been constructed in India on a gauge of 3 feet 6 inches; but I rather think that the Government should now refuse any guarantee unless the lines are constructed on the Indian gauge of 5ft. 6in.

22. *Hon. Major Richmond, C.B.*] What is the difference in maintaining a railway and a metalled road?—I should think the cost of maintenance for a metalled road such as I have estimated would be from £300 to £400 per mile, and for a railway about £150 per mile per annum.

Dr. Knight.

Dr. Knight, Auditor of Public Accounts, called in and examined.

18th August, 1867.

23. *The Chairman.*] As you were engaged officially during the past year in investigating into the condition of Southland and the best method of extricating it from its difficulties, will you state for the information of the Committee your opinion regarding the proposed extension of the Winton Railway, and the construction of a railway between Invercargill and the Mataura, stating the grounds on which you have formed the opinion at which you have arrived?—It is not easy to state in a few words the grounds of my opinion regarding the proposed extension of the Winton Railway. Southland has more than the usual proportion of rich agricultural land; but from the absence of facilities for interior communication the country is nearly useless for settlement. The railway which was intended to extend to Winton has stopped short at Invercargill. By terminating at the latter place this costly work is rendered useless for all purposes of settlement. Were it finished to Winton, a large agricultural district would be thrown open to enterprise and capital, while nearly the whole of the country beyond Winton to the Lakes could be traversed with facility. Sooner or later this great public work will be completed—the nature of the country between the Lakes and Invercargill renders this certain. In respect of the Mataura Railway the “Companies” had expended large sums of money in the cultivation