

REPORT

OF THE

SELECT COMMITTEE

ON THE CONSTRUCTION OF A

RAILWAY BETWEEN INVERCARGILL AND MATAURA,

AND THE EXTENSION OF

THE BLUFF AND WINTON RAILWAY;

TOGETHER WITH THE

PROCEEDINGS OF THE COMMITTEE AND MINUTES OF EVIDENCE.

WELLINGTON.

—
1867.

ORDERS OF REFERENCE.

Extracts from the Journals of the House of Representatives.

WEDNESDAY, 21st August, 1867.—*Ordered*, “That a Select Committee be appointed to consider any proposal for an Extension of the Bluff and Winton Railway, and for the Construction of a Railway between Invercargill and Mataura, submitted to the Government during the recess; with power to send for persons and papers, and to confer with any similar Committee appointed by the Legislative Council. Committee to consist of Mr. Wood, Mr. McNeill, Mr. Stevens, Mr. Vogel, Mr. Hankinson, Mr. McLean, and the Mover. Three to be a Quorum. Report to be brought up on the 31st August.”—(*Mr. Dillon Bell.*)

FRIDAY, 23rd August, 1867.—*Ordered*, “That the names of Mr. Cox, Major Heaphy, V.C., and Mr. Murison, be added to the Committee appointed to consider the proposal for Extending the Railway System in Southland.”—(*Mr. McNeill.*)

TUESDAY, 3rd September, 1867.—*Ordered*, “That the Select Committee on the Extension of the Bluff Harbour and Winton Railway have leave to postpone the bringing up their report for ten days.”—(*Mr. Stevens.*)

THURSDAY, 12th September, 1867.—*Ordered*, “That the Select Committee on the Bluff Harbour and Winton Railway have leave to postpone the bringing up their report for ten days.”—(*Mr. Travers.*)

REPORT.

YOUR Committee have taken into consideration the proposals submitted to the Colonial Government during the recess, for an extension of the Bluff and Winton Railway, and for the construction of a Railway between Invercargill and Mataura, and have taken all available evidence upon these questions, both verbal and documentary.

Your Committee first applied themselves to the consideration of the expediency of extending the line from Invercargill to Winton, and have arrived at the conclusion that the extension would be highly advantageous to the Province of Southland, were it compatible with existing circumstances.

They have carefully considered, in reference to both the proposed lines, the relative advantages likely to accrue from the construction in each case of a Railway of a similar gauge to the Bluff and Invercargill Railway, of an iron horse tramway, and of ordinary roads, both metalled and gravelled.

The professional and other evidence taken, leads to the following conclusions :—That the cost of the Railway extension to Winton, on a gauge similar to the Bluff and Invercargill Railway, but of a lighter character, would not be less than £55,000. That the cost of an iron horse tramway would be about £2,200 per mile. That the cost of a metalled road, adapted for heavy traffic, would be about £4,000 per mile. That the cost of a gravelled road, suitable for moderate traffic, would not exceed £2,400 per mile, assuming the cost of labour to be nine shillings per day.

Your Committee find that the probable cost of maintenance of the proposed extension of the Railway to Winton, would not be less than £2,850 per annum, and that the probable working expenses would be not less than £5,700 per annum.

Your Committee find that the probable cost of maintenance and working expenses of an iron horse tramway over the proposed line, would not be less than those of a light locomotive Railway.

Your Committee have been unable satisfactorily to ascertain the probable cost of maintaining a properly constructed metalled or gravelled road, if constructed from Invercargill to Winton, or from Invercargill to Mataura.

As regards the proposed line to Mataura, it appears that the cost of construction of a light locomotive Railway, with a gauge of 4 feet 8½ inches, would be about £165,000, taking the distance at thirty miles, exclusive of the purchase of land; and that an iron horse tramway would cost about £2,200 per mile. That the cost of a metalled road suitable for heavy traffic would be about £4,000 per mile; and that of a gravelled road, suitable for moderate traffic, about £2,400 per mile.

The present financial condition of Southland, as evidenced by returns of expenditure, estimates, &c., has also been carefully considered, with the following results.

When considered with reference to the present financial proposals of the Colonial Government, the financial affairs of Southland appear to stand as follows :—

	£
Amount payable on Provincial Debt	27,000
Colonial Expenditure, Provincially charged, about	8,000
	————— 35,000
Receivable by the Colony, being one-half probable Consolidated Revenue	20,000
Pasturage Rents	8,000
	————— 28,000
Probable annual deficit, to be defrayed out of Land Fund, before Southland can receive anything from that source	7,000

It appears also that the expenses of Provincial administration cannot be less than about £12,000 per annum, and that the Provincial Revenue raised by the Provincial Council does not exceed about £9,000 per annum.

The present population of Southland is taken at about 8,000, and your Committee have nothing to guide them in forming an estimate as to any possible increase consequent on the proposed undertakings being carried out. It appears that should any deficit arise in the working of either of the lines, if constructed, the same would have to be met by local taxation, at the same time the traffic receipts and expenditure on the Bluff and Invercargill Railway seem to have been slightly in favour of the former for the first six months of working, ending June last, but there is no evidence in the shape of Returns of present traffic to enable an estimate to be formed of the probable traffic on the proposed lines.

Your Committee find that the unsold Waste Lands in Southland exclusive of Stewart's Island are as follows—

	Acreage.	Estimated Value.
Agricultural Lands	669,779	£669,779
Pastoral Lands	957,120	358,920
Reserves for Villages, &c.	49,307	73,960
Barren Lands, Bush, &c.	277,393	34,674
Acres, total	1,953,599	£1,137,333

And think that the proposed works might be calculated to improve the prospect of realizing the unsold lands to some extent.

Your Committee are of opinion that it is inexpedient that any payments for completing the Oreti Railway, as suggested in the proposals, should be made in land, and also that should the proposed Railways be carried out on the principle of the works being paid for in land a diminution will be caused in the revenue of Southland arising from pasturage rents to the amount of about £1,375, since it appears that not less than three-fourths of the land granted in payment will probably be selected from the pastoral runs at present leased at two pence per acre per annum.

Your Committee are of opinion that grain and other crops would be grown to a much greater extent if a cheap mode of transit were provided, assuming that a market can always be found for the same, and that so soon as the finances of the Province will safely admit of it the completion of the Oreti Railway and the construction of a light locomotive Railway or horse tramway from Invercargill to Mataura are desirable. They also recommend before any new works of this nature shall be undertaken in Southland that the Oreti line shall be completed.

Upon the whole question submitted to them, your Committee are of opinion that—considering the present financial condition of Southland, its heavy liabilities and limited available assets, and the possibility, if not probability, of the large annual outlay contingent on the indispensable maintenance and working of the proposed Railways, if constructed, involving the risk of a deficiency being created requiring the imposition of additional local taxation upon the inhabitants of Southland—it is inexpedient that the proposals, or either of them, submitted to the Colonial Government during the recess, for the extension of the Oreti Railway and the construction of a Railway from Invercargill to the Mataura should be at present carried into effect.

E. C. J. STEVENS,
Chairman.

Committee Room,
19th September, 1867.

PROCEEDINGS OF COMMITTEE.

TUESDAY, 27TH AUGUST, 1867.

PRESENT :

Mr. McLean,
Mr. McNeill,
Mr. Wood,

Mr. Hankinson,
Mr. Stevens.

The Order of Reference was read.

On the motion of Mr. McNeill, Mr. Stevens was elected Chairman.

On the motion of Mr. Wood, *Ordered*, That all correspondence on the subject of railway extension in the Province of Southland be laid before the Committee.

On the motion of Mr. McNeill, *Ordered*, That the Chairman of the Committee of the Legislative Council appointed to consider the proposal for the extension of the railway system in Southland, be requested to order that copies of the evidence taken before that Committee be furnished to the Chairman of this Committee.

Ordered, That Mr. Patterson, C.E., be summoned to attend the next meeting.

Adjourned to Wednesday, 28th August, 1867.

WEDNESDAY, 28TH AUGUST, 1867.

PRESENT :

Mr. Wood,
Mr. Cox,
Mr. Murison,

Mr. Hankinson,
Mr. McNeill,
Major Heaphy, V.C.

Mr. Stevens in the Chair.

The minutes of previous meeting read and confirmed.

Mr. Patterson, C.E., attended before the Committee and was examined.

The report of Mr. Patterson's evidence, as taken before the Legislative Council Committee, was laid before the Committee, and read by the Chairman, Mr. Patterson being present at the time.

Adjourned to Thursday, the 29th August, 1867.

THURSDAY, 29TH AUGUST, 1867.

PRESENT :

Mr. Murison,
Mr. Wood,
Mr. McNeill,

Mr. Cox,
Major Heaphy, V.C.,
Mr. Hankinson.

Mr. Stevens in the Chair.

Dr. Knight's evidence before the Committee of the Legislative Council, regarding the Winton Railway, was read.

Ordered, That Dr. Knight be summoned to attend before the Committee.

Dr. Knight attended as requested, and was examined.

Mr. Patterson was in attendance, and examined.

Adjourned to Friday, the 30th August, 1867.

FRIDAY, 30TH AUGUST, 1867.

PRESENT :

Mr. Murison,
Mr. McNeill,

Mr. Wood,
Mr. Hankinson.

Major Heaphy, V.C., in the Chair.

Mr. McNeill submitted several questions to the Committee, which he desired to be put to Dr. Knight at his next attendance.

Ordered, That Dr. Knight be summoned to attend the Committee on Tuesday next.

The evidence of Mr. Walker and Mr. Rolleston, as given before the Legislative Council Committee, relative to the Bluff and Winton Railway, was read.

On motion of Mr. McNeill, *Resolved*, That the above evidence be adopted.

Mr. Weaver, C.E., was in attendance, and examined.

Adjourned to Tuesday, the 3rd September, 1867.

TUESDAY, 3RD SEPTEMBER, 1867.

PRESENT :

Mr. McNeill,
Mr. Murison,

Mr. Hankinson,
Mr. Wood.

Mr. Stevens in the Chair.

Mr. Weaver, C.E., and Dr. Knight were in attendance, and examined.

Adjourned to Wednesday, 4th September, 1867.

WEDNESDAY, 4TH SEPTEMBER, 1867.

PRESENT :

Mr. Hankinson,
Mr. Murison,
Mr. McNeill,

Major Heaphy, V.C.,
Mr. Wood.

Mr. Stevens in the Chair.

Dr. Knight was in attendance, and examined.

On motion of Mr. Hankinson, *Resolved*, That the Committee having inquired into the working expenses of the Bluff and Invercargill Railway, find that Mr. Patterson's evidence as to the working expenses of the proposed line is thoroughly borne out by the inquiry.

On motion of Mr. Murison, *Ordered*, That a sub-committee be appointed for the purpose of drawing up issues, to be placed before the Committee at a future meeting; the answers to such questions to form the basis on which the Committee should frame its report; such sub-committee to consist of the Chairman (Mr. Stevens), Mr. Wood, and the mover.

Adjourned to Tuesday, 10th September, 1867.

TUESDAY, 10TH SEPTEMBER, 1867.

PRESENT :

Mr. McNeill,
Mr. Hankinson,
Mr. Murison,

Major Heaphy, V.C.,
Mr. Wood.

Mr. Stevens in the Chair.

The Chairman read a letter from His Honor John P. Taylor, Superintendent of the Province of Southland; also a resolution of the Provincial Council of that Province, in reference to the proposed railway.

The Committee then proceeded to investigate the revenue and expenditure of the Southland Province, and found the following to be the position of the Province, under the present financial proposals of the Government :—

Payable by the Colony :—

Charges on Loans	...	...	...	...	...	...	...	...	...	£27,000
Provincial Charges	...	...	...	...	...	...	...	...	...	8,000
										<u>35,000</u>

Receivable by the Colony :—

One-half Consolidated Revenue	...	...	...	...	...	...	...	...	...	20,000
Pasturage Rents	...	...	...	...	...	...	...	...	...	8,000
										<u>28,000</u>

Deficit to come out of Land Fund	...	...	...	...	...	...	...	...	...	<u>£7,000</u>
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Available for Provincial Expenditure, being Miscellaneous Revenue receivable in the Province	...	...	...	...	...	...	...	...	...	<u>£9,000</u>
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Before Southland can receive any land fund for Provincial Appropriation, from £5,000 to £7,000 must be deducted from the proceeds of sales.

The following Resolutions were then put to the meeting, and carried :—

Resolved, That the present population of the Province of Southland be taken at 8,000 in number.

Resolved, That the Committee have no sufficient data on which to form an opinion as to the probable increase of population consequent on the carrying out of the proposed undertaking.

The Committee then proceeded to the consideration of the estimates of Provincial expenditure of Southland, when the question was put, That £1,490 be taken as the amount of a half-year's expenditure for the Bluff and New River Harbours.

The Committee divided with the following result :—

Ayes.
Mr. Murison,
Mr. Hankinson,
Mr. McNeill,

No.
Mr. Wood.

So it passed in the affirmative.

The Committee finally estimated the Provincial expenditure of Southland, for six months, at the following sums :

Executive	...	...	...	...	...	...	...	...	...	£777
Legislative	...	...	...	...	...	...	...	...	...	204
Electoral	...	...	...	...	...	...	...	...	...	10
Administration of Justice	...	...	...	...	...	...	...	...	...	1,463
Hospital and Lunatic Asylum	...	...	...	...	...	...	...	...	...	700
Harbours	...	...	...	...	...	...	...	...	...	1,490
Education	...	...	...	...	...	...	...	...	...	250
Miscellaneous	...	...	...	...	...	...	...	...	...	1,137
Repairs of roads (not included)	...	...	...	...	...	...	...	...	...	
										<u>£6,031</u>
For six months	...	...	...	...	...	...	...	...	...	£6,031
For twelve months	...	...	...	...	...	...	...	...	...	<u>£12,062</u>

the amount of the indispensable Provincial ordinary expenditure for one year.

Adjourned to Wednesday, the 11th September, 1867.

WEDNESDAY, 11TH SEPTEMBER, 1867.

PRESENT :

Mr. Murison,
Mr. Cox,
Mr. McNeill,

Mr. Hankinson,
Major Heaphy, V.C.,
Mr. Wood.

Mr. Stevens in the Chair.

A letter from the Superintendent of Southland to the Colonial Secretary, dated 17th August, 1867, was read.

Resolved, That in the opinion of the Committee, the lowest sum for which the line between Invercargill and Winton can be completed, with the same gauge as the Bluff and Invercargill Railway, is £55,000.

Resolved, That, considering the rough character of the survey made, the Committee having heard Mr. Wood's evidence, are of opinion that the decision already arrived at in respect of cost should be affirmed.

Resolved, That in the opinion of the Committee it would require about £4,000 per mile to form a metalled road from Invercargill to Winton.

Resolved, That the Committee finds that ordinary gravelled cart roads available for light traffic might be made on the proposed lines of railway at a cost not exceeding £2,400 per mile.

Moved by Mr. Wood, seconded by Mr. Hankinson, That as loads of a weight of from four to five tons have constantly to be conveyed over the proposed lines, roads suited for light traffic only would not suit the requirements of the Province.

Negated.

Resolved, That in the opinion of the Committee the cost of maintaining the proposed line between Invercargill and Winton could not be less than £2,850 annually.

Resolved, That in the opinion of this Committee the cost of the annual expense connected with the working of the proposed line between Invercargill and Winton would not be less than £5,700.

Resolved, That in the opinion of this Committee the lowest sum for which the proposed line from Invercargill to Mataura could be constructed (on a 4 feet 8½ inch gauge) would be about £165,000—assuming the distance to be thirty miles, and the character of the railway to be the same as that proposed for the completion of the Winton Railway for £55,000.

Resolved, That in the opinion of this Committee it would require about £4,000 per mile to form a metalled road from Invercargill to Mataura.

Resolved, That in the opinion of this Committee the cost of the annual expenses connected with the working of the proposed line between Invercargill and Mataura would not be less than £9,000.

Resolved, That in the opinion of this Committee the cost of maintaining the proposed line between Invercargill and Mataura would not be less than £4,500 annually.

Resolved, That from the evidence taken it appears that the working expenses and wear and tear of a horse tramway from Invercargill to Mataura would not be less than those of a light railway.

Resolved, That the Secretary of Crown Lands be requested to furnish the Committee with a return showing the amount of land contained within the Province of Southland, exclusive of Stewart's Island. The return to show also as nearly as possible the acreage of land sold, held under pastoral license, barren, bush, acreage of remainder, and how it is held.

Adjourned to Thursday, 12th September, 1867.

THURSDAY, 12TH SEPTEMBER, 1867.

PRESENT :

Mr. McNeill,
Mr. Cox,
Mr. Wood,

Mr. Murison,
Mr. Hankinson.

Mr. Stevens in the Chair.

Resolved, That the Committee find that the present unsold Waste Lands in Southland are as follows :—

	Acres.
Agricultural land	669,779
Pastoral land	957,120
Reserves for villages, &c.	49,307
Stewart's Island	500,935
Barren lands, bush, &c.	277,393
	<u>2,454,534</u>

That the value of these may be estimated as follows, exclusive of Stewart's Island :—

Agricultural land	£669,779
Pastoral land	358,920
Reserves for villages, &c.	73,960
Barren lands, bush, &c.	34,674
	<u>£1,137,333</u>

Resolved, That the proposed works might be calculated to improve, to some extent, the prospect of realizing the unsold lands.

Resolved, That the Committee find that the population consists of 8,085, of all ages.

Resolved, That there is no reliable evidence before the Committee to enable them to arrive at a conclusion as to the probable traffic receipts, to set against the estimated cost of maintenance and working expenses of the proposed lines.

Resolved, That in the event of the traffic receipts being unequal to the cost of maintenance and working expenses, the deficiency must be defrayed out of Land Fund or by local taxation, which it is inexpedient should be risked for such object as the proposed Railway Extension, in the present condition of the Province of Southland.

Adjourned to Friday, the 13th September, 1867.

FRIDAY, 13TH SEPTEMBER, 1867.

PRESENT :

Mr. Murison,
Mr. Hankinson,
Mr. Wood,

Mr. McNeill,
Mr. Cox,
Major Heap, V.C.

Mr. Stevens in the Chair.

Resolved, That in the opinion of this Committee the lowest cost of constructing a light locomotive railway with a 4 feet 8½ inch gauge from Invercargill to Mataura would require about £5,500 per mile.

Resolved, That this Committee are of opinion that the cost of constructing a light horse tramway either between Mataura and Invercargill, or between the latter place and Winton, would be about £2,200 per mile.

Resolved, That this Committee cannot from the evidence ascertain the probable cost of maintaining a metalled road between Invercargill and Winton, or Invercargill and Mataura, should such roads be constructed.

Resolved, That the Committee are unable to form an opinion with reference to the amount required to maintain annually properly constructed gravelled roads over the proposed lines.

Resolved, That it is in the opinion of the Committee inexpedient that any payments for completing the Oreti Railway, as suggested in the proposals, should be made in land.

Resolved, That the Committee find that the probable diminution in the revenue of Southland from pasturage rents, in the event of the construction of the proposed railways, will be not less than £1,375, from the circumstance that three-fourths of the land granted in payment will probably be selected from the pastoral runs at present leased at twopence per acre.

Resolved, That the Committee is of opinion that grain and other crops would be grown to a much greater extent if a cheap mode of transit were provided, provided that a market can always be found for the same.

Resolved, That in the opinion of this Committee the completion of the Oreti Railway is desirable so soon as the finances of the Province will admit of it.

Resolved, That the Chairman (Mr. Stevens) do draw up a report.

Adjourned to Monday, the 16th September, 1867.

MONDAY, 16TH SEPTEMBER, 1867.

PRESENT :

Mr. McNeill,
Mr. Cox,
Major Heaphy, V.C.,

Mr. Hankinson,
Mr. Wood.

Mr. Stevens in the Chair.

Resolved, That the construction of a railway or horse tramway, from Invercargill to Mataura, is desirable, when the finances of the Province will admit of its being safely undertaken.

Resolved, That in the opinion of this Committee, before new railway works in Southland are undertaken, it is desirable to complete the Oreti line.

Resolved, That the proposals for an extension at present of the Bluff and Winton Railway, and for the construction of a railway between Invercargill and the Mataura, submitted to the Government during the recess, do not meet with the approval of this Committee.

Adjourned to Thursday, 19th September, 1867.

THURSDAY, 19TH SEPTEMBER, 1867.

PRESENT :

Mr. Wood,
Mr. Murison,

Mr. Hankinson.

Mr. McNeill in the Chair.

A draft report was read and adopted.

The Committee then adjourned *sine die*.

MINUTES OF EVIDENCE.

EVIDENCE TAKEN BEFORE THE SELECT COMMITTEE OF THE LEGISLATIVE COUNCIL.

THURSDAY, 15TH AUGUST, 1867.

The Hon. Mr. Holmes called in and examined.

1. *Hon. Major Richmond, C.B.*] Is it the object of the mover of this Committee to bring forward information and evidence not before known to the General Government, for the purpose of inducing the Government to withdraw their sanction to the undertaking?—Such was the object for which the Committee was moved. *Hon. Mr. Holmes.*
15th August, 1867.

2. Has a contract been entered into for the undertaking referred to?—No contract has been entered into.

FRIDAY, 16TH AUGUST, 1867.

Mr. Patterson, C.E., called in and examined.

3. *Hon. Major Richardson.*] You are, I believe, a Member of the Institute of Civil Engineers, and have professionally examined the Oreti and the Mataura lines of railway?—I am a Member of the Institute of Civil Engineers, and have examined professionally the Oreti line, but not the Mataura line. *Mr. Patterson, C.E.*
16th August, 1867.

4. *Hon. Mr. Holmes.*] Can you give an approximate estimate of the cost in money of completing the Oreti Railway, uniform in gauge and quality with the Bluff and Invercargill line?—At the request of the Provincial Government of Southland, I made an examination of the Oreti Railway about fifteen months ago, and reported to the Government the probable expense of completing the line to Winton, about nineteen miles north from Invercargill. At that time I furnished a report and estimate of the probable cost of completing the line to Winton, upon the same gauge as the Bluff Harbour and Invercargill Railway, with iron rails, so that the same class of plant might be used upon both lines; but I did not propose to complete the Oreti Railway in exactly the same manner as the Bluff and Invercargill line. The estimate I then furnished to Government for completing the line to Winton was £50,000. I would now increase that estimate by about £5,000, as some of the materials then lying on the ground, which might have been used, would now be useless. I do not know precisely the cost of the permanent way of the Bluff and Invercargill Railway, but I should think that to finish the Winton Railway, with the same class of permanent way as on the Bluff Railway, would cost a further sum of about £20,000, or a total of £75,000.

5. Does your estimate include the renewal of the wood works of the completed part of the Oreti line, and also the timber in store for the completion of the remainder of the permanent way?—I would propose an entire reconstruction of the present permanent way, dispensing entirely with longitudinal timber baulks, and substituting iron rails, fastened to timber sleepers laid transversely; but I propose to use the cross sleepers at present laid on the road, so far as they would be available for that purpose, as well as those already provided but not hitherto laid.

6. *Hon. Mr. Menzies.*] Does your estimate of £55,000, for the completion of the Oreti Railway, contemplate the use of iron rail of 35lbs.?—No, of iron rails, weighing 56lbs. per yard, which would be sufficiently heavy to allow the same class of stock as on the Bluff Harbour Railway to be used.

7. What would the permanent way, with rails of 56lbs., cost, delivered at the Bluff?—The iron for the permanent way would cost about £1,000 per mile, delivered at the Bluff.

8. The permanent way costing £1,000 per mile—the whole cost being about £2,600 per mile—upon what works would the balance of about £1,600 per mile, be expended?—In addition to the iron for the permanent way, a large amount would be required for sleepers; and the line, with the exception of about one-fourth, would require ballasting. Altogether, I estimate the cost of the permanent way at £45,000; the remainder of the amount being the cost of completion of earthwork, renewal of culverts and bridges, completion of fencing, and sundry other works, including station accommodation and expense of supervision.

9. *Hon. Mr. Holmes.*] Does your estimate include rolling stock, stations, and sheds?—It includes stations and sheds, but not rolling-stock.

10. How much would the engines, carriages, and trucks for that line cost?—I think a sum of about £8,000 would be sufficient, if new stock was required; but when I reported on this subject to the Government, I was aware that the engine stock provided for the Bluff Railway would be sufficient to work the Oreti Railway as well, for some time to come at all events; and also that they had provided other rolling stock, which might also be made partially available for the same purpose.

11. Apart from the ordinary working expenses, what would be the annual cost per mile of keeping in repair the rolling stock and the permanent way?—I cannot give a definite answer, because the cost would depend on the amount of traffic. The cost of maintenance, exclusive of rolling-stock, would probably amount to about £100 per mile.

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

and stocking of their valuable estates in the district lying between Invercargill and the Mataura River. At one of their farms they had not less than 4,000 acres of land fenced and under cultivation. In this work many thousand pounds had been wasted, owing to the want of ordinary means of transit. The most disheartening accounts were current of the difficulties the "Companies" had had to contend with; and it is feared they will be driven—if not to abandon—at least greatly to contract their agricultural operations. They had at their disposal, for investment in New Zealand, British capital to the amount of nearly £2,000,000. They had already invested largely in Southland. It was impossible in such a case not to take a great interest in the welfare of the Province, and the duties which the Legislature had imposed upon me to settle the Southland debts rendered it moreover my business to call the attention of the General Government to the exigencies of the Province. It seemed to me that the value of the estate which the Government held in trust would not be diminished by setting aside a part of it for completing the Winton Railway and for constructing a railway between Invercargill and the Mataura. Both lines are trunk lines. The railway to the Mataura would be a great aid to the Province of Otago, by giving a ready and by much the cheapest outlet to the Hundreds on the eastern side of the Mataura; while to the Companies' Farms and the settlers in the neighbourhood of the line, it would at once be the means of making their undertakings profitable. I also thought if Waste Lands were taken in payment for the execution of the works and the Government could be assured that the cost would not exceed one acre for every pound cash the works were estimated to cost, that it would be well to encourage the Provincial Government to undertake them. And I reasoned thus:—The proceeds from land sales ought not to be treated as ordinary revenue. They should be strictly devoted to the improvement and settlement of the country. It was, therefore, a legitimate proceeding to pay for public works in land, seeing that without these works no Waste Lands of the Province were likely to be sold. The increased value given to the land would more than make up for the diminution of the acreage of the estate. Those who purchased waste lands could not allow them to lie waste. It would be their interest to bring settlers into the district. Besides the expenditure of hard cash on the public works there would be a number of industrious workmen left to settle in the Province, and instead of the land there would be its representative in the shape of most useful public works. Yet not in lieu of the land, for the land would still remain; but instead of lying in idle waste would be in the hands of colonists anxious to increase the population and the productive powers of the Province. Without population the land is worthless except to the runholder, and for him it would be best that he should have good roads. If this valuable estate were in the hands of capitalists they would do what I advise to be done. In their case the land sold would be a loss of territory, but in the case of the Province it is idle to treat it as a loss. The land remains to the Province, and the increase of revenue of customs and other public receipts would enable the Province to bear with ease the burden of the interest and sinking fund of the debt for which the General Government now holds the Waste Lands of the Province in trust.

Dr. Knight.
Continued.

WEDNESDAY, 21ST AUGUST, 1867.

W. Rolleston, Esq., called in and examined.

24. *Hon. Mr. Holmes.*] How would you describe yourself?—I am Under Secretary in the Native Department. *W. Rolleston, Esq.*

25. Have you had any opportunity of observing the effects arising from the alienation of Crown Lands in payment of public works; if you have, will you state, for the information of the Committee, whether you were in any official position at the time, and at what place?—I was Provincial Secretary of Canterbury for about two years, until the month of June, 1865, and have had such opportunities during that time. *21st August, 1867.*

26. Be so good as to state to the Committee, in a concise form, the regulations affecting the disposal of these lands, both as regards ordinary public works and also railways?—The Waste Lands Regulations evidently do not contemplate paying for large public works with the Waste Lands of the Crown. They carefully avoid the appropriation of land for any such purpose, to any greater extent than 1000 acres, without a special vote of the Provincial Council. The Regulations also provide that a special piece of land shall be set apart for any special work, and reserved for that purpose by the Superintendent previous to the work being entered upon.

27. Are you of opinion that, with reference to the former, full value is received for the lands alienated?—The Regulations provide that it is only upon a certificate that full value has been received that payment should be made; but, as a matter of practice, it is generally understood that the land goes at a depreciated value.

28. Can you state the ordinary amount of depreciation, if any, of such land orders?—I have been informed that the land orders are to be purchased at ten per cent. below the original value of the land. My informant was Mr. Stevens, of Canterbury.

29. Do the Waste Land Boards practically exercise any control over the due performance of such contracts?—I never heard of any instance of any control being exercised by the Waste Land Boards.

30. Can you give the Committee any information about the contract for the Great Southern Railway of Canterbury?—The contract for the Great Southern Railway was for the completion of thirty-three and a-half miles between Christchurch and Rakaia, for a sum of £210,000, payable in monthly instalments, in the following manner; viz., one-half cash, one-fourth in Provincial Government Debentures, six per cent., taken at ninety, and one-fourth in land at £2 per acre. The payment is made upon the basis of the sum total of £210,000, on an estimate agreed upon between the Contractors and the Engineer of the value of the work done. I was a member of the Provincial Government when the contract was entered into. It was understood at the time that about five per cent. on the contract would be the depreciation. The sum total of the contract was larger by £10,000 than it would otherwise have been.

W. Rolleston, Esq.
Continued.

31. Has any question of the legality of such alienation of land arisen, and if so what was the decision, if any?—I am aware that a correspondence was laid upon the Table of the Provincial Council of Canterbury, last session, in which the legality of the alienation was called in question by the General Government.

32. Has the illegality, or supposed illegality of such contract been met by any compromise; and, if so, in what manner?—I have not seen the correspondence, but I am informed that it shows the nature of the compromise, by which the payment is virtually made in land, but ostensibly by other means.

33. What is your opinion of the effect of having such land orders floating about the country, both as regards the sale of Crown Lands, and those in the possession of private individuals?—I think that the system, if persisted in, must end in bringing the Government into competition with private land sellers; and I think it would interfere with the property of private individuals.

34. What would be the effect upon local taxation of such masses of unoccupied Waste Lands?—I think it would be most injurious if they did escape taxation. It appears to depend upon local legislation.

35. *Hon. Mr. Menzies.*] Would the depreciation referred to, in answer to question No. 27, affect the public creditors of the Provinces?—I think the public creditor is injured by any measure which causes uncertainty in the disposal of the property which forms his security, and which prevents the steady influx of population, and interferes with the general prosperity of the country.

36. *Hon. Major Richmond, C.B.*] Are the blocks of land set apart for the contractor always in the vicinity of the work?—The Waste Land Regulations provide that particular blocks are to be set aside for each particular work, but I have every reason to believe that this has not been done in this case. This amounts to giving free selection over the best lands of the Province.

37. *Hon. Mr. Menzies.*] In your reply to question No. 30, you say that the depreciation on the contract would be five per cent. How will you allocate this depreciation over the items of payment, seeing that the payment was partly a cash payment, partly in debentures, partly in land?—I could not make any allocation of the percentage, which I stated it was understood would be lost by the non-payment in cash, nor did I wish to be understood to say that it was my own opinion that the depreciation in the value of the land taken is not greater than five per cent. I believe, as I stated with regard to land orders which are to be bought in the Province of Canterbury, that ten per cent. more nearly represents the depreciation in such transactions.

FRIDAY, 23RD AUGUST, 1867.

W. Wood, Esq., M.G.A., called in and examined.

W. Wood, Esq.
23rd August, 1867.

38. *The Chairman.*] Do you hold any official position in the Province of Southland?—I am a non-official member of the Executive of Southland without salary.

39. Have you had any opportunity of observing the effects arising from the alienation of Crown Lands in payment of public works; if you have, will you state for the information of the Committee, whether you were in any official position at the time, and at what place?—I have not observed any difference in the effects of paying for public works in land, from those caused by payment in cash, at the time I was a member of the Provincial Council, and during a portion of the time a member of the Executive Council of the Province of Southland.

40. *Hon. Mr. Menzies.*] What public works have been constructed for payment in land?—There has been no great expenditure in land on public works, and it has been for the most part for the formation or repairing of roads, amounting to about £2,000. Perhaps from the works being of a limited and simple nature, no disputes have occurred, no compensation been paid, and no difficulties encountered; 25,000 acres have been used for the purpose of completing the Bluff Railway. Although I think the contractor would rather have been paid in cash, I think the Province has not suffered from payment in land.

41. *Hon. Mr. Holmes.*] Are you aware that it was proposed by the Provincial Government to give 210,000 acres of land for railway purposes?—I am aware that such a proposal was made by the Government of Southland to the General Government. I was not a member of the Executive at that time.

42. Are you aware whether any contract was entered into for making the Mataura line, or finishing the Oreti line?—I am not aware of any such conditional contract, and believe that none such has been made.

43. Has the Provincial Council of Southland made any special recommendation such as is required by sub-section two of clause 36 of the Southland Waste Lands Act?—Such a recommendation has been made to the extent of 210,000 acres for completing the Oreti line, and forming the Mataura line.

44. Was the late dissolution at all affected by the question of the alienation of Waste Lands of the Crown for railway works?—Yes, inasmuch as the majority of the Council were agreed upon the expediency of alienating the Waste Lands for such a purpose, but had not sufficient confidence in the existing Executive to entrust them with the carrying out of the work. On this account the Executive resigned their seats, and their successors pledged themselves to forward the railway project.

45. What was the relative strength of those who opposed the principle of giving land for public works at all?—I should think about one-third of the Council, composed principally of pastoral lessees of the Crown.

W. C. Walker, Esq., called in, who presented to the Committee the following written replies to questions forwarded to him.

W. C. Walker, Esq.
23rd August, 1867.

46. *Hon. Mr. Holmes.*] Have you had any opportunity of observing the effects arising from the alienation of Crown Lands in payment of public works? If you have, will you state for the information

of the Committee whether you were in any official position at the time?—I have resided in the Canterbury Province for the last five and a-half years, and have watched the effects of the alienation of Crown Lands, in payment for public works in that Province with considerable anxiety. I have sat in the last two sessions of the Provincial Council, and last session carefully examined correspondence between the General Government and the Provincial Government of Canterbury, relating to the contract between that Province and Messrs. Holmes and Co., respecting the legality of payment for work in Crown Lands. Also, the correspondence between the Provincial Government and Messrs. Holmes and Co., respecting the evasion of the above difficulty, proposed by the former and accepted by the latter; and the return of the lands alienated, in accordance with the contract entered into by the Provincial Government with Messrs. Holmes and Co., all of which papers were laid on the table of the above Provincial Council last session.

W. C. Walker, Esq.
Continued.

47. Be so good as to state to the Committee in a concise form the regulations affecting the disposal of these lands, both as regards ordinary public works, and also railways?—By a clause in the Waste Lands Regulations of Canterbury, one thousand acres is the largest amount of acreage to be alienated in payment for public works, in any one year—the number of acres to be reserved on the map in the Survey Office, at the commencement of the contract until its completion. This is the only alienation contemplated by the Land Regulations (speaking from memory, and without a copy of the Regulations to refer to); but in the case of the Great Southern Railway of Canterbury a contract was entered into by the Superintendent, and sanctioned by the Provincial Council, to pay a certain portion of the contracted price in Crown Lands, to be selected as the payments came due, and in any part of the Province.

48. Are you of opinion that, with reference to the former, full value is received for the lands alienated?—I cannot but think that contractors, in accepting such terms of payment for work done, must make, and do get, considerable allowance as difference in value between cash and Waste Lands, only profitable on improvement, and perhaps not always in a moment convertible, just as they must make allowance in accepting payment in debentures negotiable only at a certain discount.

49. Can you state the ordinary amount of depreciation, if any, of such land orders?—From personal knowledge I am not aware of any such land orders being converted into their equivalent in cash. The contractors, in the only instances which have come under my observation, have made use of them in connection with, and for the purpose of securing other investments.

50. Do the Waste Land Boards practically exercise any control over the due performance of such contracts?—Practically, the Waste Land Board has not a chance of becoming cognizant of the transaction, as will be shown in answer No. 53.

51. Can you give the Committee any information about the contract for the first Southern Railway of Canterbury?—Speaking from memory, the contract between Messrs. Holmes and Co., and the Provincial Government for the Great Southern Railway was briefly as follows: The work to be done at the rate of £6,000 per mile and to be paid half cash—one quarter debentures, the remaining quarter Crown Land at the price of £2 per acre with free selection. The Government reserving to themselves the right of paying all or more than half in cash if they thought fit, and after the completion of the first fourteen miles to be allowed with a short notice (I forget the exact date) of stopping the contract.

52. Has any question of the legality of such alienation of land arisen, and if so, what was the decision, if any?—As shewn by the correspondence laid on the table of the Provincial Council last session, the General Government pointed out the illegality of the above contract, inasmuch as it entirely disregarded the clause in the Land Regulations which specified one thousand acres as the maximum limit which could be alienated in any one year for this purpose, and after consulting its Law Officer, declared itself unable to recommend the Governor to sign the Crown Grants issued under such contract. The Provincial Government apparently accepted such decision as correct by simply acknowledging receipt of the letter of the General Government; and by immediately proposing to the contractors an evasion, which was accepted.

53. Has the illegality, or supposed illegality of such contract been met by any compromise, and if so, in what manner?—The above illegality was met by the Provincial Government proposing to the contractors to furnish them with a cheque whenever required of the amount necessary to purchase Crown Lands at the rate of £2 per acre in payment for the work done, in the proportion provided by the contract; the contractors thus handing in the cheque to the Land Board, who by this means are practically ignorant of the transfer of any Crown Land contrary to the regulations by which they are bound.

54. What is your opinion of the effect of having such Land Orders floating about the country, both as regards the sale of Crown Lands, and those in the possession of private individuals?—The effect of such issue of Crown Grants upon the sale of Waste Lands is, in the first place, to discourage *bonâ fide* settlers: as in the only instance of payments of this nature hitherto known in Canterbury, there was no restriction as to choice of locality stipulated for in the contract, and thus the best land in the Province remaining unsold has been secured by the contractors, and removed from the reach of persons wishing to purchase for *bonâ fide* settlement. A further cause of dissatisfaction to *bonâ fide* settlers is the fact, that under a contract of such a nature where no locality is specified for the land to be selected, it not unfrequently happens under this free selection that the extreme ends of the Province are spoiled of their best land, the proceeds going to benefit some other district. In the instance of the Great Southern Railway the two great blocks hitherto selected by the contractors are from two districts not even indirectly benefited by the work done. Thus another grievance and cause of jealousy is added to the others already nourished by the outlying districts against the centralizing tendencies of each Provincial Government. A further but perhaps only a prospective evil (as my experience cannot say from personal knowledge that it has yet occurred, though obviously possible) seems likely to arise from large grants of this nature to speculators, and would have the effect of depreciating both the Waste Lands remaining unsold, and the land already sold and in the occupation of private individuals; and that is the danger, that contractors in the ups and downs of trade may be

W. C. Walker, Esq.,
Continued.

obliged at any moment, under pressure, to sell the Crown Grants in their possession, and thus bring down the commercial value of what land remains unsold, and what has been sold to private individuals. In point of fact, the Government at any time might find the contractors whom they have paid in land, and who from priority of selection are sure to be in possession of land of a superior character, setting up a sale of Waste Lands in opposition to their own; and, bound by no law or regulation to keep the price up to £2 per acre, or whatever is the price fixed by the Regulations of the Province, forced by circumstances, they might undersell the Government.

55. What would be the effect on local taxation of such masses of unoccupied Waste Lands?—I cannot quite see that the simple possession of large blocks of unimproved Waste Lands, under this system of payment, would have any effect upon local taxation peculiar to itself. The contractor may be content to let the land remain unimproved, waiting for a more advantageous labour or produce market; or he may have selected it in connection with and to secure other investments: in both of which cases he would be liable for rates for road purposes for his unimproved Waste Land, the same as other holders of freehold land of that nature in the district; or he may have sold it to others for *bonâ fide* settlement at whatever price he chooses to take for it, higher or lower than the Government upset price per acre; or he may commence to farm it himself. But I cannot imagine any case which would place his land, in respect to local taxation, on any different footing from that occupied by others.

56. *Hon. Major Richmond, C.B.*] Are the blocks of land set apart for the contractors always in the vicinity of the work?—If the lands to be selected by the contractors were to be confined to the close vicinity of the work done, I can conceive there might be exceptional districts where many of the objections against this system of payment would disappear. But in the case of the Great Southern Railway of Canterbury, it was not so provided: but on the contrary, the contractors had perfectly free selection allowed them.

EVIDENCE TAKEN BEFORE THE SELECT COMMITTEE OF THE HOUSE OF REPRESENTATIVES.

WEDNESDAY, 28TH AUGUST, 1867.

PRESENT :

Mr. Wood,
Mr. Cox,
Mr. Murison,

Mr. Hankinson,
Mr. McNeill,
Major Heaphy, V.C.

Mr. Stevens in the Chair.

Mr. Patterson, C.E., called in and examined.

Mr. Patterson.

28th August, 1867.

1. *Major Heaphy.*] In reference to answer No. 18, given before the Committee of the Legislative Council—what are the causes that an ordinary carriage-road would be so expensive?—The principal causes is from the difficulty of procuring metal nearer than Greenhill, a distance of thirteen miles south of Invercargill, so that in the first instance there would be a railway carriage of thirteen miles for the stone, and a further cartage of sixteen miles, on the average.

2. What facilities would there be for obtaining ballasting for the Mataura Railroad?—At the Invercargill end of the line there are partial supplies, and at the Mataura end, abundant supplies at the Mataura Plains. I have been informed that there are further supplies at other places along the line.

3. Is the ballast mentioned as being abundant at the Mataura unfit for metal?—The material I allude to at the Mataura is gravel, and not stone fit for metalling.

4. What wood would be used for “sleepers?”—I should think totara and black-pine would be the best.

5. Is totara or black-pine available on the spot?—There is a considerable supply of black-pine, but I do not think there is much totara.

6. *Mr. Stevens.*] With reference to question No. 12, asked before the Committee of the Legislative Council, do you intend your estimate to be on the basis of the distance to the Mataura being thirty-five miles?—The country between Invercargill and Mataura is of a very uniform character, and I based my estimate on the general knowledge I possessed of that district. I believe that the length of thirty-five miles assumed by Mr. Holmes in putting the question is over stated, and the probable length of the line from Invercargill to Mataura would not exceed thirty miles.

7. *Mr. Wood.*] Suppose it were contemplated to construct a railway of a 3 feet 6 inch gauge with iron rails, suitable for light engines and carriages, what do you think would be the average cost per mile?—The mere reduction in gauge would not effect any considerable saving in the construction in that country, probably from £300 to £500 per mile. My estimate for a railway on a gauge 4 feet 8½ inches, is from £5,500 to £6,000 per mile; and for a railway with works of a similar description, but with a gauge of 3 feet 6 inches, from £5,000 to £5,500 per mile.

THURSDAY, 29TH AUGUST, 1867.

PRESENT :

Mr. Murison,
Mr. Wood,
Mr. McNeill,

Mr. Cox,
Major Heaphy, V.C.,
Mr. Hankinson.

Mr. Stevens in the Chair.

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

Dr. Knight.

29th August, 1867.

8. *The Chairman.*] What amount of acreage will there be immediately benefited by the proposed railway to Winton?—I do not know the amount of acreage, but the adjoining waste lands are, I believe, very fertile.

9. Have you formed any opinion of the advantages to be derived from the said railway?—It would be of great advantage to the Lake District, which is rich in gold and other minerals.

10. Is there a great extent of agricultural land in the Lakes District?—My impression is that there is not.

11. Have you seen the properties of the Agricultural Companies?—No, I have not.

12. Do you think it expedient to pay for public works in Crown Lands?—No. I think it is better to give money instead of land.

13. *Mr. Wood.*] Will you state the mode of payment proposed by yourself and by the Company?—The proposed railway was to be constructed by the Companies, and the value of the work estimated by a competent engineer for the Government. Payment was then to be made at the rate of one acre for every £1.

14. *Mr. McNeill.*] Was it your impression that the Companies were prepared to extend their operations in the event of their being allowed to select land in payment for the proposed works?—My impression was that they would necessarily do so.

15. When this scheme was first mooted, was it, to your knowledge, in contemplation to permit the selections to be made in blocks of not less than 20,000 acres?—Yes, my proposal was, that the blocks should not be less than 20,000 acres.

16. *Mr. Murison.*] In the event of the proposed railway being carried on to the Mataura, and payment made for its construction in 20,000 acre blocks, selected anywhere throughout the Province, will you give an opinion as to the effect which this scheme will have upon the revenues which the Province derives from the runs?—It will tend to reduce them.

17. Is the revenue which the Province derives from runs not absolutely necessary for carrying on the Government of the Province?—It would certainly be a loss to the Province if the deficiency were not made up from any other source.

18. *Mr. Wood.*] Are you of opinion that the deficiency referred to would be made up from any other source; and if so, what source?—I am of opinion that the deficiency would be made good by the annual increase of ordinary revenue consequent on occupation of the country, and from increased capacity for taxation.

19. *The Chairman.*] In estimating the expediency of the proposed line to Winton, have you allowed for the working expenses, depreciation, &c.; and is the Province able to bear any loss on this account?—The Province would be greatly inconvenienced by having to bear an outlay to the extent of £100 per mile on that account, and such I understand you to say is the estimated cost,—but I do not think the loss to the Province would be anything near that sum.

20. *Mr. McNeill.*] Why did you suggest that the blocks of land selected should not be less than 20,000 acres?—Because I think it unfair to the Province that the contractor should be able to pick out the best and most available land.

21. What class of persons did you anticipate would become ultimate possessors of the land selected; and would there not be a falling off of revenue if the runholders became the purchasers of the selected blocks of 20,000 acres?—I think the runholders would be the largest purchasers, and that the revenue derived from pastoral rents would be correspondingly diminished.

22. Under a system of selection which permits blocks of 20,000 acres to be chosen, would not the properties of those who lease the Crown Lands be deteriorated to a greater extent than the actual withdrawal of 20,000 acres from the leasehold?—I think so.

23. *The Chairman.*] Have you ascertained to your satisfaction that no appreciable amount of land will be sold, unless these works are carried out?—My impression is, that the quantity of land that will be sold for the purpose of settlement will be small.

24. *Mr. Wood.*] How small a portion of land may a cash purchaser obtain on a run?—By the 29th section of "The Southland Waste Lands Act, 1865," the smallest section is twenty acres.

25. Do you think that provision would mutilate a run more than selections made in blocks of 20,000 acres?—I think it would.

26. *Major Heaphy.*] What are the peculiar conditions of the Province of Southland that cause railroads over other roads to be pre-eminently necessary, or fitting means of communication, and how Southland differs, if at all, from other Provinces, such as Otago or Nelson, in that respect?—Much of the land in Southland is best adapted for agricultural purposes. The country around Invercargill is level and undrained, and the formation and repair of roads are, consequently, extremely costly: so much so, that there would be little difference between the cost of a railway and that of a macadamized road, while the cost of maintaining a railway would be less. An important element in the cost of roads in Southland, is the extreme distance from which stone for macadamizing has to be conveyed. These are the principal conditions in which Southland differs from the Provinces mentioned. I have with some confidence expressed my opinion as to the desirability of constructing the proposed railway. There are some points I wish more particularly to mention. It is, of course, unnecessary for me to say anything as to the necessity of road making, nor whether roads "pay." Their maintenance is always a heavy charge on the revenues of a country. When a better work is substituted for them—as a railway—its value is determined by its contribution to the wealth and progress of the country. Like an ordinary road, it does not "pay." If, as I believe, the value of the Waste Lands held in trust of the

Dr. Knight,
Continued.

General Government, would not be materially lessened by alienating a part of them in exchange for public works, and if no funds for the formation of the works can otherwise be obtained, the General Government should make a moderate reserve of the Waste Lands for such undertakings, provided that economy and good management are secured by the appointment of a skilful engineer, and provided also, that the General Government, before acceding to a recommendation of the Provincial Council that land be reserved for the contemplated railways, takes care that laws are passed to raise, by local taxation, the necessary permanent revenues for meeting the estimated annual cost of maintaining them. I have already drawn the attention of the Government to the little which has been done in Southland in the way of local taxation, and urged the necessity of making it one of the conditions of the proposed undertaking, that due provision should be made by permanent laws for securing the maintenance of public works. The present revenues of the Province are inadequate for the purpose. The alienation of the Waste Lands will materially lessen the revenues derived from the pastoral rents; and I have already warned the Government that no portion of these rents can, in my opinion, be used for any other purpose than for defraying the interest and sinking fund on the Southland debt.

Mr. Patterson, C.E.

Mr. Patterson, C.E., called in and examined.

29th August, 1867.

27. *Mr. Hankinson.*] I understand that the contract price is to be fixed at the rate of one acre for every one pound's worth of work done. Do you consider that a contractor, who only consents to take land as payment with a view to converting it into cash as speedily as possible, would take the contract on such terms?—I may state that when I was in Invercargill, a contractor was willing to undertake it in those terms, if the work were begun immediately.

28. *Mr. Wood.*] Suppose a tramway to be formed of the same gauge as the Bluff and Invercargill Railway, could the goods carriages be conveyed along the railway, and so save reloading?—Obviously, if the lines were connected.

29. What would be the probable cost per mile over the same country, namely, Invercargill to Mataura, of an iron horse tramway suitable for passengers and goods traffic?—Assuming the tramway to be made available for use in connection with the Bluff Harbour and Invercargill Railway, using horses instead of engines, I think such a tramway would cost between £2,000 to £3,000 per mile.

30. Would the working expenses and wear and tear on a tramway of the above kind be much less than a railway, and if so, in what proportion?—I think they would be much greater.

31. In a Province like Southland, would it be practicable to run a tramway along the main road, and so save the cost of fencing and paying compensation for land?—It would be practicable, but I think the tramway would be very liable to injury if unfenced.

32. If it were deemed advisable to construct ten sidings at convenient situations along such tramway, what would be the probable cost?—It would cost about as much per yard as the main tramway. They might be made for about £100 each if short.

33. *Mr. McNeill.*] Is the expense of wear and tear of a road greater or less per mile than that of a railway, supposing the road to be formed with a superstructure of gravel, and the railroad to be such as you propose should be made being at a cost say of £7,000 per mile?—If by "wear and tear" is meant maintenance of the railway works, and, on the other hand, of the road works, the cost of maintaining a railway would be less than that of a road in about the proportion of two to one.

34. Are you of opinion, from actual observation, that the rocks in the neighbourhood of the Mataura Falls, near the proposed terminus of the railway, are absolutely unsuitable for the purpose of metalling a road?—I cannot say that they are.

35. *Mr. Wood.*] Do you think that they are suitable for metal?—I am unable to answer that question.

36. *The Chairman.*] On the Winton line as proposed, what would be the probable annual cost of working the line per mile?—If properly finished, and with moderate traffic, and worked in connection with Bluff Harbour and Invercargill Railway, about £300 per mile.

FRIDAY, 30TH AUGUST, 1867.

PRESENT :

Mr. Murison,
Mr. McNeill,

Mr. Wood,
Mr. Hankinson,

Major Heaphy, V.C., in the Chair.

Mr. Weaver, C.E., called in and examined.

Mr. Weaver, C.E.

30th August, 1867.

37. *The Chairman.*] What is your profession, and do you at present hold any official appointment in the Colony?—I am a Civil Engineer, of English education; at present Chief Engineer of Auckland, and have had some experience in the construction of railways.

38. Can you give any idea as to the wear and tear of a railroad as compared with that of a road?—The maintenance of a road for light traffic would be less than that of a railroad; if the traffic were heavy it would be the reverse.

39. What is the cost of making a common road for light traffic?—It would cost from £1,200 to £2,000 per mile, if metalled to a width not exceeding twelve feet, according to the cost of materials and the character of the country.

40. Is gravel available as metal for a road on which the traffic is light?—It is.

41. *Mr. Wood.*] Suppose it were contemplated to construct a railway of a 3 feet 6 inch gauge, with iron rails, suitable for light engines and carriages; what do you think would be the average cost per mile—the country being of a slightly undulating character, with no engineering difficulties, and no bridges required except for small creeks, abundance of black-pine and totara to be had for the cutting

at a convenient distance, no rock or stone to excavate, gravel for ballast conveniently situated?—*Mr. Weaver, C.E., Continued.*
 Provided the country is as above described, a railway of the character referred to could probably be constructed for £2,500 or £3,000 per mile, exclusive of the cost of land and stations.

42. Suppose a tramway to be formed of the same gauge as the Bluff and Invercargill Railway, would the goods carriages be conveyed along the railway, and so save reloading?—Yes. But it would probably be found in practice that carriages suitable for the tramway would be of too slight a description to bear the wear and tear of the traffic on a locomotive line, while the rolling stock of the latter would be too heavy for a tram or railway worked by horse power.

43. What would be the probable cost per mile over the same country, namely, Invercargill to Mataura, of an iron horse-tramway suitable for passengers and goods traffic?—Assuming the gauge to be 4 feet 8½ inches, the cost of a light railway to be worked by horse power over a country such as that described in a former question, would be from £1,700 to £2,000 per mile, exclusive of the cost of land.

44. Would the working expenses and wear and tear on a tramway of the above kind be much less than a railway; and if so, in what proportions?—The relative proportions of the working expenses and cost of maintenance and wear and tear of the two railways would be governed to a very great extent by the amount of traffic: that is, for a small traffic the working expenses would be very much less on a line worked by horse power, while an extensive traffic could be more economically worked by locomotives.

45. In a Province like Southland, would it be practicable to run a tramway along the main road, and so save the cost of fencing and paying compensation for land, the roads in that Province being one chain wide, and for the most part straight?—Certainly.

46. *The Chairman.*] What is the best gauge for railroads in New Zealand?—The English narrow gauge is the best, namely, 4 feet 8½ inches.

47. *Mr. Hankinson.*] What would be the cost of laying the iron rails on a railroad, the earthworks of which are formed and the ballast to be carried an average distance of fifteen miles, a locomotive being employed?—About ten shillings per yard, provided the rails and sleepers are delivered to the contractor. Platelaying costs about two shillings per yard.

TUESDAY, 3RD SEPTEMBER, 1867.

PRESENT:

Mr. McNeill,
Mr. Murison,

Mr. Hankinson,
Mr. Wood.

Mr. Stevens in the Chair.

Mr. Weaver, C.E., called in and examined.

Mr. Weaver, C.E.
3rd September, 1867.

48. *Mr. Wood.*] Have you had any practical experience in the construction of railways and other such works?—I have constructed some sixteen miles of light railway for the New South Wales Government, intended to be worked by horse power, changed before completion to a light locomotive line. I have also had considerable experience on the Great Western Railway, and in Australia on private lines, and branches of Government lines.

49. Do you think a railway of a light inexpensive kind, and worked by horses, might be suited to the wants of a thinly populated district of New Zealand?—It entirely depends on the average amount of traffic.

50. *The Chairman.*] Can a light locomotive line or a horse railway be easily converted into a line of the heavy locomotive order?—Yes; if the works are properly laid out at first in regard to curves and gradients, the conversion would be easy.

51. *Mr. McNeill.*] In considering your replies to all questions involving cost of construction, what have you assumed as the cost of labour?—Ordinary, *i.e.* not skilled labour, at six shillings per day.

52. Assuming cost of such labour to be nine shillings per day, what would be the difference in cost of construction per mile?—If ordinary, *i.e.* the lowest class of labour, was at nine shillings per day my estimates generally should be increased by fifty per cent.

53. *The Chairman.*] What would be the percentage necessary to be added to cost of construction per mile, if wages were nine shillings, instead of six shillings per day, in the following cases namely, ordinary carriage road, light locomotive line, and horse tramway, gauge referred to in previous evidence?—For an ordinary carriage road, fifty per cent.; for light locomotive line, twenty-seven per cent.; and for a horse tramway, thirty per cent. The above are of course based on approximate estimates only, and on the averages of the estimated cost of works given in previous evidence.

Dr. Knight called in and examined.

Dr. Knight.
3rd September, 1867.

54. *Mr. McNeill.*] You have previously stated that without the railway, you did not think the runholders were likely to buy?—Yes.

55. From these premises does it not appear that the cost of the railway would to a considerable extent have to be borne by the runholders?—I think not.

56. *The Chairman.*] Did the probability of increased sales of Crown Lands in any material degree actuate you in making proposals for railway extension?—It did not.

Dr. Knight.
Continued.

WEDNESDAY, 4TH SEPTEMBER, 1867.

PRESENT :

Mr. Hankinson,
Mr. Murison,
Mr. McNeill,

Major Heaphy, V.C.
Mr. Wood,

Mr. Stevens in the Chair.

Dr. Knight called in and examined.

57. *Mr. McNeill.*] Does it not appear, if the scheme of selection be adopted, that advantage is being taken of the position occupied by runholders of the Province to force them into becoming purchasers to the extent of nearly £200,000?—200,000 acres would probably be taken out of runs, and to this extent the runholders would be interfered with; but whether they would elect to purchase to that extent or not is a question on which I am unable to form an opinion.

58. *Mr. Stevens.*] Have you formed any opinion of the capacity of Southland for bearing local taxation to meet the annual cost of maintaining these two railways?—I am of opinion that £10,000 per annum could be raised for the purpose by local taxation; but this sum I should think is in excess of what would be required.

WEDNESDAY, 11TH SEPTEMBER, 1867.

PRESENT :

Mr. Murison,
Mr. Cox,
Mr. McNeill,

Mr. Hankinson,
Major Heaphy, V.C.
Mr. Wood,

Mr. Stevens in the Chair.

Mr. Wood, M.G.A., called in and examined.

W. Wood, Esq.

11th September, 1867.

59. *Mr. Hankinson.*] What grounds have you for believing that the cost of completing the Oreti Railway could be reduced below the minimum stated by Mr. Patterson at £55,000, with the same gauge as the Bluff and Invercargill Railway?—I do not state my own opinion, but evidence taken before a Select Committee of the Southland Provincial Council, of which I was a member, when a railway contractor stated that he was prepared to complete the Oreti line in accordance with existing specifications for £50,000 or 50,000 acres of land. The present railway engineer in Southland also informed the Executive Government of Southland, to which I belonged, that it could be completed for considerable less than £50,000 by a departure from those specifications—one item of reduction being the Winton passengers and goods shed on which he thought a reduction might be made of £2,500, the original item being £3,000.

60. *Mr. McNeill.*] When did the Committee you mention sit?—I think about last March.

61. When was the survey made which was the basis of the plans and specifications upon which the contractor based his estimate of £50,000?—I think a short time before.

62. Are you aware that the present Superintendent, in a letter dated 17th August, 1867, states that no survey has been made on which an accurate estimate can be based, but that mere preliminary surveys costing from £20 to £30 had been made?—I am aware that surveys have been made in the first instance for making the railway which ended in only making the earthworks, since which another survey has been made, but I do not know whether it is sufficiently accurate to be taken as a basis for making plans and specifications.