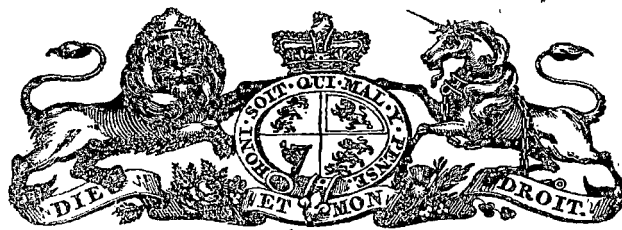


(No. 130.)



1862.

T A S M A N I A.

R A I L W A Y.

REPORT FROM THE SELECT COMMITTEE.

Brought up by Mr. Henry Butler, and ordered by the House to be printed,
16 October, 1862.



SELECT COMMITTEE appointed on the 25th July, 1862, (with power to send for persons and papers) to enquire into the question of the proposed RAILWAY between LAUNCESTON and DELORAINÉ ; to report on the feasibility or otherwise of the project ; and (if it be found feasible) the Conditions which the Committee would recommend to be embodied in a Bill for the construction and maintenance of such Railway.

MEMBERS.

THE COLONIAL TREASURER.
MR. SHARLAND.
MR. ALLISON.
MR. BALFE.
MR. BUTLER.
MR. JOHN MEREDITH.

MR. DODERY.
MR. MACLANACHAN.
MR. GRANT.
MR. DAVIES.
MR. DOWLING, (*Mover*).
MR. DOUGLAS, added 31st July, 1862.

DAYS OF MEETING.

1. 30 July, 1862. *Present*—Mr. Dowling, Mr. Sharland, Mr. Balfe, Mr. Dodery, Mr. Maclanachan, Mr. Davies, and Dr. Butler.
2. 31 July, 1862. *Present*—Mr. Douglas, Mr. Dowling, Dr. Butler, Mr. Maclanachan, Mr. Grant, Mr. John Meredith, Mr. Davies, Mr. Sharland, Mr. Balfe, and the Colonial Treasurer.
3. 5 August, 1862. *Present*—Dr. Butler, Mr. Dowling, Mr. Douglas, Mr. Maclanachan, Mr. Sharland, Mr. Allison, Mr. Dodery, Mr. Davies, and Mr. Balfe.
4. 7 August, 1862. *Present*—Mr. Dowling, Mr. Sharland, Mr. Dodery, Mr. Maclanachan, Dr. Butler, Mr. Douglas, Mr. Grant, and Mr. Allison.
5. 8 August, 1862. *Present*—Mr. Dowling, Mr. Sharland, Dr. Butler, Mr. Maclanachan, Mr. Dodery, Mr. Davies, Mr. Balfe, and Mr. John Meredith.
6. 12 August, 1862. *Present*—Mr. Dowling, Mr. Sharland, Mr. Maclanachan, Mr. Dodery, Mr. Grant, Dr. Butler, and Mr. Davies.
7. 14 August, 1862. *Present*—Mr. Sharland, Mr. Grant, Mr. Dowling, Mr. Douglas, Mr. Maclanachan, Mr. Davies, Mr. Dodery, and Mr. Allison.
8. 19 August, 1862. *Present*—Mr. Sharland, Mr. Dowling, Mr. Douglas, Mr. Maclanachan, Mr. Grant, Mr. Balfe, Mr. Davies, and the Colonial Treasurer.
9. 20 August, 1862. *Present*—Mr. Balfe, Mr. Dowling, Mr. Sharland, Mr. Maclanachan, Mr. Douglas, and Mr. John Meredith.
10. 21 August, 1862. *Present*—Dr. Butler, Mr. Sharland, Mr. Maclanachan, Mr. Dodery, Mr. Dowling, Mr. Douglas, and Mr. Grant.
11. 26 August, 1862. *Present*—Mr. Dowling, Mr. Douglas, Mr. Dodery, Mr. Maclanachan, Mr. Sharland, and Mr. Davies.
12. 27 August, 1862. *Present*—Mr. Dowling, Mr. Dodery, Mr. Davies, Mr. Balfe, Mr. Sharland, Mr. Maclanachan, Mr. Douglas, and Dr. Butler.
13. 28 August, 1862. *Present*—Mr. Dowling, Mr. Sharland, Mr. Dodery, Dr. Butler, Mr. Douglas, and Mr. Maclanachan.
14. 11 September, 1862. *Present*—Mr. Maclanachan, Mr. Douglas, Mr. Dowling, Mr. Sharland, Mr. Dodery, and Dr. Butler.
15. 12 September, 1862. *Present*—Dr. Butler, Mr. Dowling, the Colonial Treasurer, Mr. Maclanachan, Mr. Davies, Mr. Grant, Mr. Douglas, Mr. Dodery, and Mr. Sharland.
16. 17 September, 1862. *Present*—Dr. Butler, Mr. Dowling, Mr. John Meredith, Mr. Balfe, Mr. Grant, Mr. Davies, Mr. Maclanachan, Mr. Dodery, and Mr. Sharland.
17. 23 September, 1862. *Present*—Dr. Butler, Mr. Dowling, and Mr. Dodery.
18. 2 October, 1862. *Present*—Mr. Dowling, Mr. Balfe, Dr. Butler, and Mr. Dodery.
19. 14 October, 1862. *Present*—Dr. Butler, Mr. Dowling, Mr. Douglas, Mr. Grant, Mr. Maclanachan, and Mr. Davies.
20. 16 October, 1862. *Present*—Dr. Butler, Mr. Dowling, Mr. Maclanachan, Mr. Dodery, Mr. Douglas, Mr. Grant, and Mr. Davies.

WITNESSES EXAMINED.

1. Henry Dowling, Esq., M.H.A.
2. E. D. La Touche, Esq., Civil Engineer, *Launceston*.
3. The Honorable W. S. Button, Esq., M.L.C.
4. W. R. Falconer, Esq., Director of Public Works.
5. Sir Richard Dry, Knight, *Quamby*.
6. Abye Douglas, Esq., M.H.A.
7. Adolphus F. Rooke, Esq., M.H.A.
8. James Scott, Esq., Surveyor, *Launceston*.
9. Mr. John Green, Toll-gate keeper, *Prospect Village*.

10. Donald Cameron, Esq., J.P., *Evandale*.
11. William Henry Clayton, Esq., Surveyor, *Launceston*.
12. J. N. Gale, Esq., Civil Engineer.

Also by written Questions.

13. The Honorable William Archer, Esq., *Cheshunt*.
14. William Moore, Esq., *Inglis Saw Mills*.

R E P O R T .

YOUR Committee have had under their careful consideration the subject remitted to them; and they have arrived at certain Resolutions, which they submit to your Honorable House, as follows :—

1. That the instruction contained in the Report of the Joint Committee of the Legislature of this Colony in 1860—that a careful Survey of this Line of Railway should be made by a competent Engineer—has been fully complied with by the Promoters, through the services of Mr. Doyne, a Member of the British Institute of Civil Engineers.

2. That it has been proved that the Country intended to be traversed by the Railway is peculiarly adapted to the economical construction and working of the proposed Railway; and, from the Evidence before the Committee, it appears that the sum of £400,000 will be sufficient to cover the outlay necessary to complete the Line, including interest at 6 per cent. during construction, and the payment of compensation.

3. That, looking to the extension of Railways in Victoria, it is absolutely essential to the agricultural interests of the Western Districts, that they may be afforded Railway Communication as set out by them in the Resolutions adopted at their Public Meetings, and in their Petitions to both Houses of Parliament.

4. That, presuming the outlay to be limited to the said sum of £400,000, it appears from the Evidence that the receipts after the first three years' traffic may be estimated as sufficient to cover the interest on capital at 6 per cent., and the working expenses.

5. That the abrupt termination of the Session of the Parliament has prevented the Committee from giving sufficient consideration to the further instructions of the House as to the conditions to be embodied in any Bill for the construction and maintenance of the proposed Railway.

Your Committee append the whole of the Evidence which they have taken during the Session, and Copies of all Papers which have been laid before your Honorable House, and before your Committee, on the subject of the proposed Railway from Launceston to Deloraine; and your Committee recommend that they be printed.

HENRY BUTLER, *Chairman.*

Committee Room, 16th October, 1862.

MINUTES OF THE COMMITTEE.

No. 1.

The Committee met at 11 A.M. on Wednesday, 30th July, 1862.

Present—Mr. Dowling, Mr. Sharland, Mr. Balfe, Mr. Dodery, Mr. Maclanachan, Mr. Davies, Dr. Butler.

1. Mr. Dowling moved to the Chair.

2. Plans of the proposed Railway and Road Districts laid before the Committee.

Witnesses to be summoned for the following days :—Sir Richard Dry; the Director of Public Works; Mr. Latouche; Warden of Longford; A. F. Rooke, Esq.; H. Dowling, Esq., Thursday, at 11 o'clock.

The Committee adjourn at 11⁴⁵ o'clock to Thursday at 11 o'clock.

No. 2.

The Committee met at 11 A.M. on Thursday, 31st July, 1862.

Present—Mr. Douglas, Mr. Dowling, Dr. Butler, Mr. Maclanachan, Mr. Grant, Mr. J. Meredith, Mr. Davies, Mr. Sharland, Mr. Balfe, Mr. Colonial Treasurer.

1. Dr. Butler was moved to the Chair.

2. Mr. Henry Dowling called in and examined.

Certain Papers and Returns handed in, and ordered to be printed, for the information of the Committee only.

Question put—That the following Witnesses be summoned :—Sir R. Dry; Mr. Rooke; Mr. Dodery; Mr. Latouche, for Tuesday, at 11; Mr. Nichols; Director of Public Works. Carried.

The Committee adjourn at 12⁴⁰ to Tuesday next, at 11.

No. 3.

The Committee met at 11 A.M. on Tuesday, 5th August, 1862.

Present—Dr. Butler, Mr. Dowling, Mr. Douglas, Mr. Maclanachan, Mr. Sharland, Mr. Allison, Mr. Dodery, Mr. Davies, Mr. Balfe.

1. Mr. Latouche called in and examined.

2. Ordered, that the evidence of Mr. Latouche be printed for the use of the Committee.

3. Ordered, that Mr. Falconer be summoned for Thursday; and Mr. Button, Mr. Rooke, Mr. Dodery, and Sir Richard Dry. Carried.

4. The Committee adjourn at 1¹⁰ to 11 on Thursday.

No. 4.

The Committee met at 11 A.M. on Thursday, 7th August, 1862.

Present—Mr. Dowling, Mr. Sharland, Mr. Dodery, Mr. Maclanachan, Mr. Butler, Mr. Douglas, Mr. Grant, Mr. Allison.

1. Dr. Butler took the Chair.

2. Hon. W. S. Button called in and examined.

3. Mr. Falconer called in and examined.

The Committee adjourn at 1⁴⁰ to 11 to-morrow.

No. 5.

The Committee met at 11 o'clock A.M. on Friday, 8th August, 1862.

Present—Mr. Dowling, Mr. Sharland, Mr. Butler (in Chair), Mr. Maclanachan, Mr. Dodery, Mr. Davies, Mr. Balfe, Mr. J. Meredith.

1. Mr. Falconer's Evidence of yesterday read over to him, and corrected; and he was further examined.

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(Discussion having ensued on a portion of Mr. Falconer's Evidence, the witness was requested to withdraw.)

2. Petition from 11 persons at Patterson's Plains laid before the Committee.
3. Contract and Correspondence with Mr. Doyne as to the Survey to be laid on the Table.
4. Mr. Latouche to be summoned for Tuesday next at 11.
5. Apply to Colonial Treasurer for N.S.W. Railroads.

The Committee adjourn at 1:15 to Tuesday at 11.

No. 6.

The Committee met at 11 o'clock on Tuesday, 12 August, 1862.

Present—Mr. Dowling, Mr. Sharland, Mr. Maclanachan, Mr. Dodery, Mr. Grant, Mr. Butler, (in Chair), Mr. Davies.

1. Mr. W. Archer's Letter put in by Mr. J. Meredith, and read.

2. Mr. Latouche called in and examined.

3. Sir R. Dry called in and examined.

4. Mr. Guerin, Mr. Scott, and Mr. Donald Cameron to be summoned to give Evidence before the Committee.

A Special Committee to be summoned for Thursday at 11.

The Committee adjourn at 1:30 to Thursday at 11.

Mr. Guerin and Mr. Scott to be summoned for Thursday at 11.

No. 7.

The Committee met at 11 o'clock on Thursday, 14 August, 1862.

Present—Mr. Sharland, Mr. Grant, Mr. Dowling, Mr. Douglas, Mr. Maclanachan, Mr. Davies, Mr. Dodery, Mr. Allison.

1. Mr. Davies moved to the Chair.

2. Mr. Sharland moved, that Green and Muirhead, Toll-gate keepers at the Westbury Gate and the Main Gate, be summoned for Tuesday next at 11.

3. Mr. Douglas moved, that Mr. Dowling and Mr. Sharland be a Sub-Committee to prepare Interrogatories to be submitted to Mr. Guerin on the subject of his Surveys, with a request that he will verify his answers before a J.P. Carried.

4. Telegraph to Mr. James Scott to attend on Tuesday at 11 o'clock.

5. Mr. W. Archer's Letter, 4th August, 1862, again read.

Mr. Sharland moved that he be summoned for Thursday next at 11, or time most convenient to himself. Carried.

Mr. Donald Cameron to be summoned on Thursday.

6. Agreement with Mr. Doyne read.

7. Mr. Dodery, M.H.A., examined.

8. Mr. Douglas, M.H.A., examined.

9. Mr. Rooke M.H.A., examined.

The Committee adjourn at 1:15 to Tuesday next at 11.

No. 8.

The Committee met at 11 o'clock on Tuesday, 19th August, 1862.

Present—Mr. Sharland, Mr. Dowling, Mr. Douglas, Mr. Maclanachan, Mr. Balfe, Mr. Davies, Mr. Colonial Treasurer, Mr. Grant.

1. Mr. Balfe moved to the Chair.

2. James Scott, Esq., called in and examined.

3. Report of Board of Works, Launceston, read to Committee.

4. Mr. Sharland moved that the Committee adjourn till to-morrow, at eleven.

Mr. Dowling objected on account of presence of a Constable, Witness from Launceston.

Question put on adjournment, and carried.

The Committee adjourned at a quarter to two.

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No. 9.

The Committee met at 11 o'clock on Wednesday, 20th August, 1862.

Present—Mr. Balfe, Mr. Dowling, Mr. Sharland, Mr. Maclanachan, Mr. Douglas, Mr. J. Meredith.

1. Mr. Balfe was moved to the Chair.

2. Mr. Scott attended the Committee.

Mr. Balfe having retired, Mr. Maclanachan was moved to the Chair.

3. Mr. John Green, Toll-keeper, Prospect, called in and examined.

4. Mr. Gale ordered to be summoned for to-morrow, at Eleven.

The Committee adjourned at 1.20 till to-morrow, at Eleven.

No. 10.

The Committee met at 11 o'clock on Thursday, 21st August, 1862.

Present—Dr. Butler, Mr. Sharland, Mr. Maclanachan, Mr. Dodery, Mr. Dowling, Mr. Douglas, Mr. Grant.

1. Mr. William Archer's letter of 4th July, 1862, again read.

2. A number of questions were proposed by Mr. Sharland, Mr. Maclanachan, and Mr. Dowling, to be put to Mr. W. Archer of Cheshunt.

The Committee adjourned at a quarter to One to Tuesday next at Eleven.

No. 11.

The Committee met at 11 A.M. on Tuesday, the 26th August, 1862.

Present—Mr. Dowling, Mr. Douglas, Mr. Dodery, Mr. Maclanachan, Mr. Sharland, Mr. Davies.

1. Mr. Davies in the Chair.

2. Donald Cameron, Esq., called in and examined.

3. Mr. Maclanachan took the Chair on Mr. Davies leaving.

4. Mr. W. Archer to have a copy of his letter to Mr. Meredith.

5. Mr. W. H. Clayton to be summoned for Thursday, at Eleven.

The Committee adjourned at 1.40 to to-morrow, at Eleven.

No. 12.

The Committee met at 11 A.M. on Wednesday, the 27th August, 1862.

Present—Mr. Dowling, Mr. Dodery, Mr. Davies, Mr. Balfe, Mr. Sharland, Mr. Maclanachan, Mr. Douglas, Mr. Butler.

1. Mr. Maclanachan was moved to the Chair.

2. Mr. Guerin to be summoned to attend the Committee (*Mr. Dowling*), care of Mr. Phinn, House of Assembly, Victoria.

The Committee adjourn at 12 to 12 to-morrow.

No. 13.

The Committee met at 12 o'clock on Thursday, 28th August, 1862.

Present—Mr. Dowling, Mr. Sharland, Mr. Butler, (in the Chair), Mr. Dodery, Mr. Douglas, Mr. Maclanachan.

1. W. H. Clayton, Esq., called in and examined.

The Committee adjourn at 2.5 to to-morrow at 12.

No. 14.

The Committee met at 11 A.M. on Thursday, 11th September, 1862.

Present—Mr. Maclanachan, Mr. Douglas, Mr. Dowling, Mr. Sharland, Mr. Dodery, Mr. Butler, (Chairman.)

1. Mr. William Archer's answers to queries read ; also Mr. Tully's letter to Colonial Treasurer.
 2. Resolved that copies of the questions (items of estimate) given to Mr. Clayton be forwarded to Mr. Falconer with a request that he will fill in his replies thereto.
 3. All the evidence to be printed up as soon as possible.
 4. Resolved that the Committee meet to-morrow to send interrogatories to Mr. Guerin.
 5. Mr. William Moore to be summoned for to-morrow at eleven.
 6. Ordered that Mr. Gale's neglect to attend the summons of the Committee be reported to the House.
- The Committee adjourned at 12 o'clock to eleven o'clock to-morrow.

No. 15.

The Committee met at 11 A.M. on Friday, 12th September, 1862.

Present—Mr. Butler (Chairman), Mr. Dowling, Mr. Innes, Mr. Maclanachan, Mr. Davies, Mr. Grant, Mr. Douglas, Mr. Dodery, Mr. Sharland.

1. Minutes of last Meeting read.
2. Messrs. Dowling, Sharland, Balfe, and Dr. Butler to be a Sub-Committee to prepare Questions for Mr. Guerin.
3. Mr. Moore's Evidence before the Committee on Roadways was read to this Committee.
4. Mr. Dowling submits certain Questions to Mr. Moore. Question put and passed.
5. Mr. Gale ordered to be summoned for Tuesday, at eleven.

The Committee adjourn at 12:20 to 11 on Tuesday.

No. 16.

The Committee met at 11 o'clock A.M. on Wednesday, the 17th September, 1862.

Present—Dr. Butler, Mr. Dowling, Mr. J. Meredith, Mr. Balfe, Mr. Grant, Mr. Davies, Mr. Maclanachan, Mr. Dodery, Mr. Sharland.

1. Mr. Gale called in and examined.
2. Mr. Dowling put in certain papers to be printed for information of the Committee.
3. Ordered, that the Queries be sent by to-night's post to Mr. Guerin at Melbourne.

The Committee adjourned at 1.

No. 17.

The Committee met at 11 o'clock on Tuesday, the 23rd September, 1862.

Present—Mr. Butler, Mr. Dowling, Mr. Dodery.

1. The Chairman laid on the Table Mr. Latouche's letter of 22nd September, 1862, with its enclosures, and moved that they be printed. Question put and passed.
2. Resolved, That all the papers, including Mr. Moore's evidence, be now printed up, and a copy forwarded by the Clerk to each Member of the Committee, with a copy of the proposed Resolutions of the Promoters ; and a special notice that the Committee will meet to consider the said Resolutions on Thursday, the 2nd October, at 11 o'clock.

The Committee adjourn at 12 to Thursday, 2nd October, at 11 o'clock.

No. 18.

The Committee met at 11 o'clock on Thursday, 2nd October, 1862.

Present—Mr. Dowling, Mr. Butler, Mr. Balfe, Mr. Dodery.

1. Resolved that the Committee adjourn to to-morrow, at 11 o'clock.

The Committee adjourned at 11:30.

No. 19.

The Committee met at 11 o'clock on Tuesday, the 14th October, 1862.

Present—Dr. Butler, Mr. Dowling, Mr. Douglas, Mr. Grant, Mr. Maclanachan, Mr. Davies.

1. Mr. Finn's letter was read.

2. Mr. Latouche's letter of 22nd September, 1862, to Dr. Butler, read. Also Abstract of Prices. Also Mr. Moore's replies to Queries. Also letter from Mr. Dowling to Mr. Higginbotham and his reply. Also letter from Mr. Dowling to Mr. R. C. Gunn, and reply from Mr. James Scott.

3. Progress Report to be brought up, with a view to the Evidence being printed. The Mersey and Sorell Petitions and the General Petition to be printed with the Evidence.

The Committee adjourned to 10 o'clock on Thursday next.

No. 20.

The Committee met at 10.35 on Thursday, 16th October, 1862.

Present—Mr. Butler, Mr. Dowling, Mr. Maclanachan, Mr. Dodery, Mr. Douglas, Mr. Grant, Mr. Davies.

1. The Committee proceeded to consider the Resolutions proposed by the Promoters of the Launceston and Western Railway :—

Resolution 1 read.	Mr. Douglas proposed its adoption.	Carried.
Resolution 2 read.	Mr. Douglas proposed its adoption.	Carried.
Resolution 3 read.	Carried.	
Resolution 4 read.	Carried.	
Resolution 5 read.	Carried.	

Ordered that the Resolutions, with the Evidence, be brought up to the House this evening.

The Committee adjourned at 1 *sine die*.

EVIDENCE.

THURSDAY, 31 JULY, 1862.

HENRY DOWLING, *Esq., M.H.A., called in and examined.*

1. You have acted as Chairman of the Promoters of the Launceston and Western Railway for some considerable period? Yes; from the year 1857, when I presided at a large Meeting of Northern Colonists at Launceston, until a few months ago, when Sir Richard Dry accepted the Presidency. That Meeting was preceded by several Local Meetings; the Resolutions adopted at which, as published by the Chairmen, the Promoters desire me to lay before this Committee (A-B.)

2. Who are the Committee of Promoters? The present Committee are—Sir Richard Dry, W. S. Button, J. Crookes, I. Sherwin, A. Douglas, H. Dowling, James Robertson, J. Aikenhead, Alexander Rose, C. G. Casey, J. Cohen, C. J. Weedon, A. F. Rooke, C. S. Henty, W. Gibson, J. K. Archer, T. K. Archer, Joseph Archer, R. Q. Kermode, H. B. Nickolls, Samuel Henry, Alexander Clerke, R. H. Douglas, J. P. Jones, W. Dodery, W. P. Weston.

3. Will you state when the question was before Parliament prior to the present Session? The question, as proposed by the Public Meetings I have just referred to, was before Joint Parliamentary Committees in 1858 and 1860, and the Reports of the Committees will be found amongst the Parliamentary Papers in those years; but, prior to these years (in 1857 I think) a preliminary Survey of the Line was undertaken by the Local Government.

4. What followed, on the part of the Promoters, the Report of 1860? They proceeded to collect funds towards procuring the Survey of the whole Line by a competent Engineer, as recommended by the Report, and adopted by both Houses.

5. Will you state briefly the result of this movement? As briefly as I am able. It having been found that a Survey such as alone would be acceptable to British Capitalists and Contractors would cost £2500, including Parliamentary Plans, £1000 was raised by subscription: the list of Subscribers' names I beg to hand in (C.) The Parliamentary Vote of £1500 made up the necessary sum. This £1000 was in addition to other subscriptions, now amounting in all to fully £500, for other expenses incident to the question.

6. And then the Promoters secured the services of Mr. Doyne? Yes. Mr. Doyne, whose name must be now known to this Committee, was in Sydney, *en route* for London from Nelson in New Zealand, where he had been engaged professionally, when the Promoters heard of him, and entered into arrangements for his visiting this Colony. The result of his visit was his engagement as Engineer, at the fee already named.

7. The Colonists, then, on the Northern side of the Island, have subscribed, in all, towards the examination of the project, some £1500? Yes, altogether.

8. Will you produce the testimonials, or any other papers the Promoters may have received, by which they were enabled to judge of the prior experience and qualifications of Mr. Doyne? Yes. I produce (D.) a letter from Mr. Spiller, the Agent in New South Wales of Sir Morten Peto and Co., of London, to whom the Promoters had applied for advice; (E.) Extract from a printed paper of the Legislative Council of Ceylon, containing a copy of a Despatch from Mr. Labouchere, 14 November, 1857, in which Mr. Doyne is favorably referred to; (F.) Copies of original documents in the possession of Mr. Doyne, the originals themselves having been given up by me after the Promoters had submitted them to Sir Henry Young and the Ministry. These papers comprise letter from Mr. Manby, Secretary to the Institute of Civil Engineers, to Mr. Rouse, the Resident Engineer of the Alexandria Railway, and which remains in Mr. Doyne's hands in consequence of Mr. Rouse not being at Alexandria when the Overland Mail by which Mr. Doyne travelled got there; letter from Sir Henry Ward, Governor of Ceylon; letter from Lord Panmure; and an extract from a further Parliamentary Paper at Ceylon, in which Mr. Doyne states the period of his professional experience, and the works in which he had been engaged. I put in a further paper by Mr. Doyne himself, dated February 2nd, this year (G.)

9. Where is Mr. Doyne now? He has left the Colonies for a few months, to accomplish professional objects he had in view when he was detained from proceeding to London by our engagement with him early last year. He has, however, left as his representative, Mr. La Touche, a gentleman who had served under him at Ceylon for four years on the most difficult portion of the Ceylon Railway, and who was engaged with him in the Survey of this Line, with full authority to represent him in all matters; and Mr. Doyne has addressed to the Promoters the highest testimony to the ability and experience of Mr. La Touche.

10. The Promoters propose to offer Mr. La Touche as an Engineering witness, representing Mr. Doyne, in this enquiry? Yes.

11. You produce Mr. Doyne's Report? Yes; copies have already been supplied to Members of both Houses of the Legislature.

12. You produce the Plans and Sections and Book of Reference? Yes; I also put in Copy of Notice and Declaration of Service of Notice to every person whose land is comprised within the limits of deviation described on the Plan and included in the said Book of Reference (H.)

13. Will you explain to this Committee what Papers, with reference to traffic, the Promoters propose to present to this Committee? They propose to produce a recapitulation of Returns (produced to the Parliament in 1860) taken at the two turnpike gates through which the principal traffic reaches Launceston; viz.,—Sand-hill Toll-gate, on the Main Line, and Prospect Toll-gate, on the Westbury Line, for 12 months ending June 30, 1860, and Declarations of the correctness of these Returns (I.) In proof of the traffic continuing to be as large as those Returns represent, I have further to lay before the Committee a Return, under the signature of the Collector of Customs at Launceston, showing that for the year ending 30th June, 1862, 1107 tons of produce were exported above the corresponding period ending 30th June, 1860, being 20,395 tons in 1860 and 21,502 tons in 1862 (K.) I have also to state that the turnpike gates have all let at considerably more in 1862 than in 1859; and I put in papers in proof of this (L.) The Promoters desire it may be understood that, from these Returns they are satisfied that the Traffic Returns at the gates, ending June, 1860, may be taken as safe data for the present enquiry.

14. You will please produce any other Returns the Promoters may have had prepared for this Committee. These Returns are,—Return of population within the influence of the Railway (M.); Relative proportions of population, land in cultivation, produce, and live stock in proposed Railway District and the Colony (N.); Comparative Statement of acres in cultivation in the Railway District and the Colony at large for 1859 and 1861 (O.); Return showing production in this respect, and for 1861, of the four Police Districts included within the proposed Railway District (P.); Returns of the present rates of cartage to Launceston from Longford and Deloraine (Q.); Comparative Statement of present rates of cartage per bushel of grain from Deloraine and Longford to Launceston, and the cost of carriage by rail at $6\frac{1}{2}d$ per ton per mile (R.); Statement of Revenue Traffic, if $6\frac{1}{2}d$. (being a little under present rates) per ton per mile were charged (R.); Comparative Return, based on Mr. Doyne's estimate, page 10 of his Report (S.); similar Return made out by the Promoters from the *actual* Returns of 1860, at the turnpike gates, at $4d$. per ton per mile (T.)

15. These Papers do not comprise the traffic in produce and passengers between the Districts themselves? No; on that question I produce a series of Interrogatories addressed by Mr. Doyne, in February last, to residents in the Districts of Deloraine and Longford, and Replies from a Public Meeting of inhabitants at Deloraine (V.), and from the Warden of Longford (Mr. Nickols), and Mr. Dodery, the Member for Norfolk Plains in the House of Assembly (W.)

16. You will also produce some interrogatories addressed by Mr. Doyne to London on the subject of raising money for the purpose in question? Yes; I am instructed to produce these, and to say that they comprise most important questions, and the replies thereto, from Messrs. Lowndes, Surgery, and Woolley, whom I know to be highly respectable Stock Brokers in London (X.)

17. Can you produce the Resolutions of the Northern Colonists at Meetings held after the promulgation of Mr. Doyne's Report and the serving of the legal notices of the intention of the Promoters? Yes; I was present at the Meeting, and the Resolutions, including the Petition to the Governor for a Railway Bill, were carried unanimously in one of the largest aggregate Meetings ever held in Launceston. Sir Richard Dry presided (Y.) I also produce Resolutions passed at a later period (*i.e.*, the 14th of this month) by an equally large Meeting, also presided over by Sir Richard Dry (Z.)

18. You have to produce some calculations made by the Promoters of the assessed value of the proposed Railway Districts? Yes; from the Official Returns in 1861 there was produced by Police Rate, at $6d$.:—

For Deloraine	£658	
Westbury	941	
Morven	868	
Longford	1374	
Launceston	868	
	<hr/>	
	£4709	
Representing, therefore a value of.....		£188,000
And taking the assessed value of Launceston Municipality at		80,000
		<hr/>
We have the large sum of.....		£268,000

So that a rate of 7*d.* in the Pound (say 3½*d.* by the Districts and 3½*d.* by the Government), would nearly represent the large deficiency of 2 per cent. on the capital sum of £400,000.

19. Do you lay on this Table the Draft Bill proposed at the instance of the Promoters? Yes; but in doing so, it is my duty to represent to the Committee that the Bill has been drawn with reference to the requirements of the Government, as will be seen by the Correspondence laid on the Table of the House on Friday, by the Colonial Treasurer. The Promoters desire that it may be specially understood that they do not consider all the requirements referred to as just to the people of the Northern Division of the Colony.

TUESDAY, 6 AUGUST, 1862.

E. D. LA TOUCHE, *Esq., C.E., called in and examined.*

1. You are a Civil Engineer, and are authorised to represent Mr. Doyne in this inquiry? I am.

2. Will you state to the Committee your experience as a Railway Engineer? I was articled in 1847 to Mr. Hemans (then Engineer-in-Chief of the Midland Great Western Railway of Ireland,) for a period of 3 years, and was actively employed on the Survey and Works of that Line during my pupillage, and subsequently as a paid Assistant for 12 months. I was then engaged on the South-Eastern Railway of Switzerland as Resident Engineer on a portion of that Line for 20 months. I then returned to Ireland, and was employed for some months in the preparation of Contract Plans and Bridge Drawings on the Dundalk and Enniskillen Railways. I subsequently was engaged for about 18 months in the preparation of the Plans and Estimates of a Railway from Philippeville to Constantine in Algeria, and from Lisbon to Oporto in Portugal, for Mr. John Fowler, now Engineer to the Metropolitan Lines. I then entered into an engagement with the Ceylon Railway Company to proceed to Ceylon as one of a Staff of Engineers, of which Mr. Doyne was the Chief, to construct a Line of Railway from Colombo to Kandy. This engagement was for 4 years; and, on its expiry last December, I came down here to assist Mr. Doyne in the preparation of the Plans and Estimates of the Launceston and Western Railway.

3. What part have you taken in the preparation of Mr. Doyne's Plans and Estimates for the Launceston and Western Railway? I superintended the office work, examined the Level Books and Survey Books of the Surveyors, ascertained that distinct lines of levels had been run over the ground, and that these agreed at the various Stations to a few hundredths of a foot. I checked the accuracy of the Survey Lines by means of the magnetic bearings, which were taken as a check at every change of direction. I further checked the levels between Launceston and Perth by means of the aneroid; as between these places alone would an error be of serious consequence. I, moreover, calculated the quantities of earthwork and brickwork in the culverts, and consider myself personally responsible for these details.

4. Are you personally acquainted with the Country through which the proposed Line of Railway is to pass? Intimately: I have inspected every portion of the Line as at present laid out, and consider that, both in an engineering and commercial point of view, it is the best line that can be selected between Launceston and Deloraine: and I am, moreover, of opinion that any deviation from it will involve a largely increased Expenditure.

5. What opinion have you arrived at as to the facilities for making this Railway in comparison with those afforded by other Countries? I consider that the District through which the Railway is to pass affords unusual facilities for its construction. With the exception of that portion of the Line between St. Leonards and Evandale, and of the bridge and embankments at Longford, the works may be said to consist merely of forming the road, and laying the permanent way. Again, it will be a great facility that nearly all the heavy work will be comprised within a short distance, whereby a contractor will be enabled to concentrate his force in the most advantageous manner, and with the utmost economy of time and money.

6. What is the amount of earth-work per mile on this Line? The average number of cubic yards to the mile on the entire Line is 18,000; but for the portion of the Line between Longford and Deloraine there are not 9000 yards per mile: on the main Line of Victoria there are 54,000 yards to the mile, or a quantity three times as great. Again, on the Launceston and Western Railway there is not a single over-road Bridge, while on some of the Lines on which I have been engaged I have known as many as 50 in the same distance, and on the Main Line of Victoria there are 33. With the exception of Longford Bridge and two other iron-topped Bridges, there is not a single opening that cannot be spanned by timber constructions. Again, sleepers of the best quality can be procured in the immediate vicinity of this Railway, while

in other Countries timber has to be imported, and (even in Victoria) has to be brought from a great distance. There will be, moreover, great facilities in this District for ballasting the Line, as gravel can be procured in the cuttings through which it will pass; whereby the use of stone broken by hand or by machine will be avoided, and one of the most formidable items of expenditure on the Victorian Lines got rid of.

7. Have you examined the sum put down for Working Expenses by Mr. Doyne? I have; it is £26,000 a year. I have gone very carefully into this matter, and consider it most ample. I have had an opportunity lately, whilst in Melbourne, through the kindness of the Engineers-in-Chief of the Victorian or Government Lines and of the Hobson's Bay Company, of inspecting their books,—of ascertaining their actual working expenses,—and thus have been enabled to form a correct estimate of the probable working expenses of the Launceston and Western Railway. Adopting the prices of labor and cost of fuel ruling in Victoria, and a scale of management similar to that in force on the Hobson's Bay Company's Lines,—over which 64 trains pass daily, and 2,500,000 passengers are carried yearly, and 160,000 tons of goods,—I estimate that £26,000 a year will not only cover the working expenses and maintenance of road, but will, in addition, leave a margin of £2500 a year for contingencies, besides providing for renewals of permanent way and rolling stock. I estimate the working expenses as follows:—

Five trains a day, train miles per annum, 68,860.

	£
Running and Coaching expenses, including Station Masters and Guards	9,002
Maintenance of Way	5,249
General charges, including Engineering, Secretary's Office, Storekeeper's Department, &c.....	5,749
Total Working Expenses.....	£20,000
Renewal Fund for Permanent Way, which, if funded, will admit of the Rolling Stock and Sleepers being renewed every 10 years, and the Rails every 20 years.....	3,500
Balance for Contingencies.....	2,500
	<u>£26,000</u>

The average cost per train mile on the Victorian Lines for the running expenses of an Engine amounts to 16·62*d.*, on the Hobson's Bay Company's Lines to 13·77*d.*, and for the Launceston and Western Railway, I assume it at 16·386*d.* This does not include the Coaching expenses mentioned above in the summary.

8. Are you of opinion that Mr. Doyne's Estimate of £364,350 is sufficient for the construction of the Line? I believe it to be amply sufficient, and that no difficulty will be found in procuring contractors to construct it for that sum.

By Mr. Sharland.—1. Have you a written authority from Mr. Doyne to act for him and to sign the Railway Map? I have.

2. Were the results arrived at, as detailed in your examination, ascertained by boring into the ground? No.

3. How did you ascertain what was under the surface, with regard to rock or sand? The greater part of the cuttings are so shallow that there is evident proof that no rock exists, as we shall barely remove the soil. In the deep cuttings at the back of the Cocked Hat Hill there is also *prima facie* evidence that no rock exists, and I may add, that the deeper the cutting the less difference there would be, whether it was rock or clay. In the neighbourhood of Perth, and the low country at the foot of St. Leonards, the rock crops out on the surface; and in all such instances it has been allowed for.

4. What is the depth of the cutting at St. Leonards and the Cocked Hat? At St. Leonards, from 10 to 12 feet; and at the back of Cocked Hat, from 30 to 35 feet.

5. Then it was the appearance on the surface at the Cocked Hat which induced you to conclude that there was no rock underneath? Such I believe to be the reasons by which Mr. Doyne was enabled to arrive at his conclusion, and which I have been able subsequently to endorse by personal examination.

6. Are you responsible for the cutting proposed at the Cocked Hat? I am professionally of opinion that Mr. Doyne is correct; but I am not responsible.

7. Is that which you have now described the usual way that Railway Plans and Estimates are constructed? Yes; in all cases where it is as easy to judge of the ground as it is here.

8. Who made the calculations? I made the calculations of quantities.

9. What do you mean by quantities? I mean the amount of cubic yards of earth in excavation, and the amount of cubic yards of brick-work in culverts.

10. If your opinion of the subsoil be incorrect, would it not materially increase the cost of the Railway? In shallow cuttings it would; in deep cuttings the difference would not be as great.

11. Have you in your calculations made any allowance for such difficulties? None beyond the usual contingencies inserted at the end of the Estimate, as we believe our calculations to be correct.

12. Is it not usual to examine the subsoil in some other method than simply walking over the ground? Not in places where it is as easy to judge of the subsoil as it is here. On the line of Railway from Lisbon to Oporto, on which I was engaged, no borings were taken on a line of 120 miles in length. On the line of Railway from Constantine to Phillipville in Algeria, for which Messrs. Peto and Brassey made an offer of contract, no borings were taken, a distance of 60 miles.

13. What experience have you had to enable you to judge of the subsoil in this country? Wells, slips, ravines, natural geological formations, and cuttings along the various lines of road.

14. Are you aware that in many parts of this Country the surface exhibits a fair sward of grass, and is very rocky underneath? I have not remarked that in the vicinity of our Line. I believe wherever there is rock there is an indication of it on the surface.

15. All your calculations are based upon having no difficult rock cuttings? We have allowed for 26,029 cubic yards of rocks.

16. Are you responsible for this Report signed by Mr. Doyne? I am not responsible.

By Mr. Allison.—Are there any land springs? I walked over the land in a very dry season, and I do not think there are any beyond those to be provided for by culverts. On this point we have reliable information from our Surveyors.

By Mr. Douglas.—1. The cuttings of any importance are those between Jingle's Valley and the crossing of the Evandale Road? Nearly all the heavy work lies between those two places; the distance between them being from 5 to 7 miles.

2. Do not the valleys and breaks in the hills between those points clearly indicate the nature of the subsoil over which the Line passes? Yes, I consider so.

3. A great deal of this cutting is sidelong cutting? All on sidelong cuttings: the whole of those 5 miles run on sidelong ground.

4. Are the shallow cuttings on the present line expensive or inexpensive? Inexpensive, where there is clay; and expensive where there is rock.

5. Is there any probability of your finding stone cuttings where you have estimated for clay? I do not think so.

6. Are there any indications of stone cuttings between the Longford side of Perth and Deloraine? I do not think so: and, in proof, there are no indications of stone in the cuttings on the Westbury Road at the nearest points to the Line. The distance from the Longford side of Perth to Deloraine is 28 miles.

By Mr. Dowling.—1. What is the average distance of the Line surveyed, from the Westbury Road? For 14 miles we run nearly parallel with the Road, at a distance of from a quarter to three quarters of a mile.

2. You have spoken of your responsibility. Do I understand you to mean you are not responsible to the Promoters, or that you are now giving professional opinions for which you are irresponsible? I mean I am not responsible to Promoters. I am responsible for my professional opinions.

3. Are you prepared fully to endorse the professional opinions of Mr. Doyne, as exhibited in his Report? I am fully prepared to endorse Mr. Doyne's opinions.

4. Are the cuttings in the rock at St. Leonard's heavy as to length? The rock at St. Leonard's is a quarter of a mile in length.

5. What is the cubic contents in yards? 11,901.

6. Is not the country from Jingle's Valley to the Cocked Hat Hill, through which this Survey passes, already under cultivation? Entirely.

7. Is it generally usual in preliminary enquiries to make examination by boring of cuttings of the small extent and character of these on this Line? Certainly not of such small cuttings.

8. Have you thought it necessary that such borings should be made to enable you to arrive at the conclusion you have already stated to this Committee? I do not think such borings were necessary.

9. Is it not an engineering fact that in a deep cutting (say of 30 feet) a cutting in rock would be cheaper than if in loam or sand? It would depend on the slope at which the sides of the cutting would stand. If a cutting of clay, where the slopes would have to be very flat, the quantity to be excavated would be so very large that it might become much dearer than rock, which would stand almost perpendicular.

10. Do you not regard yourself as professionally responsible for the correctness of the Engineering Statements in Mr. Doyne's Report? I hold myself responsible for the correctness of Mr. Doyne's Report so far as professional questions are concerned. I cannot hold myself responsible for his opinions, although I may professionally agree with him.

11. Do you professionally agree with Mr. Doyne's Report as a whole? I do.

By Mr. Sharland.—In the event of any error being found in the Estimates, Plans, or Specifications, who, in your opinion, should the Promoters look to for redress? To Mr. Doyne.

What do you mean when you say that you endorse Mr. Doyne's opinions, but are not responsible for them? I mean that Mr. Doyne entered into a contract with the Promoters of the Western Railway, that a report was made by him, and not by me, and that therefore he is responsible for his own opinions. As a member of the Engineering Profession I agree with him in those opinions, but cannot be responsible for a Report which I did not make.

Is it not possible, in making a Railway Survey, to arrive at conclusions founded upon fact rather than on opinions? It is possible; but it may sometimes involve unnecessary expense and trouble.

Might not the absence of such facts lead to a serious extra expense? In this instance I do not think so.

By Mr. Dowling.—Do you consider Mr. Doyne to have founded his Reports generally on facts or mere opinions? Generally on facts: where it is founded on opinion, those opinions have been formed on facts.

Do you believe that any facts have been neglected by Mr. Doyne which he ought to have availed himself of in this enquiry? I do not.

Mr. La Touche retired. [See page 12.]

THURSDAY, 7 AUGUST, 1862.

The Hon. W. S. BUTTON, Esq., M.L.C., called in and examined.

1. You have had before you Mr. Doyne's Report and Estimates? I have.

2. From your personal knowledge of that gentleman, what is your opinion of his qualifications as an Engineer? I believe Mr. Doyne's qualifications as an Engineer to be of a very high order. I have had frequent opportunities of arriving at that conclusion.

3. Will you state to the Committee your opinions of the conclusions he has arrived at in his Report, as well as of the data on which he has based his recommendations generally? My opinion is, that those conclusions are fully sustained. The estimated cost of the work very nearly agrees with the Report of other Engineers who have gone over the Line. The data on which Returns of present traffic are based I believe to be correct and reliable; while it is evident to every person acquainted with the natural resources of the country and business relations of the District that a large addition must be made to the present traffic, and many new items brought in.

4. You have had before you, also, the calculations of the Traffic Returns placed before this Committee by the Promoters. What do you think of the estimate, based on an average mileage rate of $6\frac{1}{2}d.$ per ton per mile, and passengers at $2d.$ per mile? I think the estimate fair and reasonable. The mileage rates, I have no doubt, may be reduced when the Line has been in work for a year or two.

5. Do you think Mr. Doyne's estimate of traffic to arise from inter-district traffic reasonable and probable? There must already be a great deal of intermediate traffic not taken into the present Returns, and that traffic must be greatly increased by Railway facilities; but I am not so well able to form an opinion of the amount of traffic as persons immediately connected with the several localities through which it is proposed the Line should run.

6. Do you conclude that, after the first year, even at lower rates of traffic than sixpence halfpenny per mile, the Promoters would pay interest at six per cent. for working expenses? I think so. After a short time—a year or two—increased traffic would allow of lower rates being charged.

7. You were a member of the Joint Committee of Parliament in 1860? I was.

8. Do you now agree with the opinion expressed in the 6th paragraph of that Report? viz.—

“That it has been clearly shown to your Committee that a sufficient revenue would be derived from the present traffic to pay the ordinary current expenses of the Line, and the interest of the money invested in its construction; while all experience has proved that the introduction of Railroads invariably increases such traffic more than twofold, and generally in a much greater proportion.”

I concur in that opinion. I have seen nothing to affect it since that time, but believe that it has received increased weight from certain circumstances.

9. That Report was adopted by the Upper House? It was.

10. Have you in any way altered your opinion respecting the paying nature of the Line since 1860, and in what respect? I have not altered my opinion on that subject.

11. You are familiar with the natural features of the country around Launceston and along the present lines of road and the projected Railway? I know the country and the roads referred to.

12. Can you inform the Committee whether the longer Line proposed by Mr. Doyne possesses advantages over the more direct route of the present roads, sufficient to compensate for the increased distance? I think the Line laid down by Mr. Doyne is better than any that can be laid down in the direction of any of the present roads. No impartial person, I think, could hesitate in his opinion on that subject. My opinion is formed on the following considerations:—The Line embraces a greater extent of productive country, and a much larger population; the work can be performed at much less expense for making the road, and the traffic carried through at much less charge, in consequence of the gradients obtained. I believe also, that more reliable estimates of the cost of a Railroad could be obtained than by taking any direct Line from Launceston, as the proposed Railroad would be carried further from the Basaltic Ranges that run parallel with the present Westbury Road.

13. Do you still retain the opinion that the construction of this Railway is absolutely necessary to the future well-being of the Agricultural interests of the Districts to be affected? I think there is a very great necessity existing for it. The reductions in price affecting all Agricultural produce require that every facility should be given to the growers to convey their grain to market at the least expense possible, and to enable them to turn to account other productions which at the present time are unremunerative. I believe it is only by the adoption of such means that many occupiers of land in the Districts referred to will be able to maintain their position.

14. Do you think the construction of a Tramway to the Mersey, from Deloraine, would affect injuriously the Revenue of the Railway? I do not think so. I believe the formation of a Tramway to the Mersey would ultimately increase the traffic on the Railway; for, while a Tramway might take the bulk of agricultural produce from the country beyond Deloraine to the Mersey, it would bring many articles of traffic for transit along the Railroad and to Launceston that now are not available from the cost of transport. It would open up for the Railway passenger traffic to and from the North Coast. I don't mean by that, that it would take the bulk of the present traffic on the Launceston Line, but that the increase of Agricultural produce and Agriculture there might go principally to the Mersey.

15. Can you state any general benefits of Railway Communication, founded on the experience of the Old World. I have had no opportunity of acquiring personal knowledge; but, from my reading on the subject, I am strengthened in my opinion that it would be of great benefit to the Colony. I have seen that Railroads, corresponding in character with our proposed Railroad, are very considerably extending in England, that Railways are being constructed for the purpose of

carrying at moderate speed, and consequently low rates of charge, Agricultural Produce, Coals, and articles of small value, throughout Rural Districts.

16. Do you refer to Districts which you have a personal knowledge of? I mean Districts with which I am personally acquainted; and I have been surprised at finding that Districts of small population, and solely depending on Agriculture, have formed Railroads and derived very profitable results from them.

By the Chairman.—17. Do you know the names of the principal Engineers and Surveyors who assisted Mr. Doyne in the work? Mr. La Touche was the principal assistant in the work.

By Mr. Sharland.—18. You have said that it is your opinion that Mr. Doyne's conclusions are fully sustained. How have you arrived at that conclusion? I have carefully read the Report, and I feel assured that those conclusions are just from the premises, and I am strengthened by the opinions of other Engineers to whom I have spoken,—Colonel Thompson and Mr. Rose, Engineers, who were here from England, and also Mr. Gale, the Engineer of the Hobart Town Water Works.

19. Then are you guided by their opinions, or have you made any calculations yourself? I am not professionally able to decide a question of that sort, but concurrent circumstances fully warrant me in arriving at that conclusion. Mr. Doyne says in his Report, that the natural features of the country afford facilities for Railroads, and from my own personal knowledge I can confirm those conclusions. The circumstances of the District itself would warrant the conclusion which he draws as to the Revenue to be derived from the traffic producing £70,000 a year. Then I form an opinion as to the cost of constructing Railroads, from learning that such works in England, where the country is favorable, can be constructed, and are being constructed, at from Five to Six or Seven thousand Pounds per mile. The County of Norfolk, with which I am acquainted, has lately had a Railroad laid down at about £5000 per mile, and it is enabled to carry goods at less than a farthing a mile.

20. Do you produce evidence in confirmation of the latter part of your statement in respect to Railways in England, to which you have alluded? I do not know where to refer to it, but I have read it in the local English Newspapers. I have seen in George Stephenson's life, at any rate, sufficient accounts of Railways to justify the statement of the low cost of construction. With regard to the £5000 a mile, I have obtained that information from reading a Report of a Meeting of a Railway Company in Norfolk, at which the well-known Engineer, Mr. Bidder, presided, and at which Meeting the Chairman also said, that he had satisfied himself that the statement of the Directors was correct that the Railroad could convey certain classes of goods at half a farthing a mile. I have learnt that, when a moderate speed is obtained, the cost of construction and of maintaining a Railroad is less than where a high speed is required to be obtained.

21. Are you aware, as a matter of fact, whether such a Railway has been constructed? I am informed that it is now at work, by a person from the locality. With reference to the low price of construction at present, I desire to quote from p. 26 of "Hemans' Railway System in Ireland," by Mr. Hemans, a Member of the Institution of Civil Engineers in England; a work published by that Institution in 1859. Mr. Hemans says—"The economy in construction which had now been arrived at was very remarkable. Within the last few months the construction of 100 miles of Railway in Ireland had been let in four contracts; three being out of his own office. In two cases the works had been taken at £5000 a mile, including the permanent way and Stations; and in another instance at £4000 per mile, with the permanent way complete."

22. You have said that the estimate of 6*d.* per mile, as calculated by Mr. Doyne, is a fair and reasonable charge for goods; are you aware that that sum is the charge at present by waggons and carts? The charge by the present road is now somewhere about 10*d.* per ton per mile from Deloraine.

23. You have said that the charge per mile might be reduced in one or two years; are you not aware that the sleepers and other parts of the Railway are liable to injury and decay in about 10 years? Yes; but that is allowed for in the estimate of working expenses. My opinion is not formed at all on that consideration, but from the great advantages which must accrue to the District, and the increased traffic which must result from it. I would further explain that, in working expenses, is included the expense of repair of all the Rolling Stock.

24. Supposing the land now in cultivation to be laid down in grass, or go out of cultivation, would it not materially affect the Revenue derived from the Railway? It would certainly affect Revenue derived from the Railroad, as it would affect every other interest in the Colony; but that is a result less likely to be produced with the advantages of a Railroad than without them. I have no doubt myself but that the area of cultivated land will be greatly enlarged.

25. You have given your opinion of the line of this Railway. Have you examined it since the line has been marked out? No; I have not. I have known the general features of the country for more than a quarter of a century, and *they* remain the same as before the line was marked out.

26. Then your opinion is formed from knowing the general features of the ground? No; not altogether. My evidence already shows that it is not confined only to this, but to the various advantages of the Line.

27. Will you state what are the advantages of the Line to which you refer? The advantages are already stated in answer 12. I have nothing to add to that at present.

28. You have said that Railways are extending in England. Are you aware, of your own knowledge, that they pay the Shareholders? I speak of very recent works being established. Of my own knowledge I cannot give an answer as to their paying. I can only say that the Share List in the *Times* gives a greater number of Railroads paying Interest than formerly. I consider the question of this Railroad one affecting the general interests of the Colony, and not to be affected by any mere calculation of what would pay Shareholders in a Company.

W. R. FALCONER, *Esq.*, *Director of Public Works, called in and examined.*

By Mr. Douglas.—1. You are the Director of Public Works and a Civil Engineer by profession? I am.

2. Have you examined the Plans and Estimates of Mr. Doyne? I have looked over the Plans and examined the published Estimates.

3. Will you state to the Committee your opinion of his Estimates? Are you of opinion that the Line would be constructed and maintained at his prices? I consider the Estimates in Mr. Doyne's Report, page 5, to be at fair prices, with the exception of Land Compensation and Stations, for which I am of opinion sufficient allowance has not been made. I hand in a copy of Mr. Doyne's Estimate, and, with the additions I have made thereto, I am of opinion that the Line may be constructed in the manner proposed by Mr. Doyne. (Paper marked A 2.)

The best guide for ascertaining the expense of the cost of working and maintaining the Line will be best collected from the data afforded by Railway Statistics of other Colonies.

By Mr. Dowling.—4. You have spoken of Mr. Doyne's Estimate at page 5. Are you aware that the figures at page 5 are not Mr. Doyne's Estimate, but that they are found at page 4? I consider Mr. Doyne's Estimates refer to everything connected with the Launceston and Deloraine Railroad, and this is given in detail at page 5.

5. Will you read the 3rd paragraph, at page 4, of the Report? (Read.)

6. Will you read the 2nd paragraph of the Report, at page 5, commencing with the word comparison? (Read.) There is a marginal note "the item of interest is not included in my Estimate *ante*:" the sum of £1,000, in page 5, is allowed for interest and sundries; if this were added to Mr. Doyne's Estimate of £8,287 per mile, the result would be £9,287 per mile. The data of Mr. Doyne, which I have given from page 5, is £9,179 per mile.

7. Have you personally made any calculation of the probable amount of interest to be incurred during construction? Yes; during construction, and of the first year of working. I understand, from Mr. Doyne's Report, that the first year of working is to be paid out of the capital.

8. Will you point out where in the Report such a conclusion is to be arrived at? At page 5. I consider, from what Mr. Doyne allows for interest, that he meant interest would be paid out of capital for the first year.

9. If traffic returns paid the interest during the first year, would it not make a great difference in the interest to be paid? It would make a material difference in the interest required to be paid.

10. If a substantial firm of London Contractors were to enter into security with the Government for executing the whole work, at Mr. Doyne's estimate, as appears at page 4, would you not deem this a satisfactory settlement of the question of the estimate there given? No; for there appear, a number of items at page 5 which would not likely come under their contract. Of these,—first, preliminary expenses, Act of Parliament; second, land and compensation; and thirdly, portion of No. 7, the whole of No. 8, No. 9, and No. 10.

11. Well then, supposing the Committee adopted a recommendation to Parliament that the Line should not be commenced until the Executive were satisfied that £400,000 would cover all costs whatever, would you deem this to be a sufficient protection to the Public and the Government? Yes.

FRIDAY, 8 AUGUST, 1862.

W. R. FALCONER, *Esq.*, again called in and examined.

By Mr. Dowling.—1. Will you state to the Committee your experience as a Civil Engineer? I have mostly been connected with Gas and Water Works and Marine Engineering. For some short time I was on the Railways near Glasgow; and I have a general knowledge of the working of Railways in Canada and the United States.

2. Will you extend this information by details of your employment from the date of your articles to the present? First, two years in the Office of Mr. John Herbertson, Architect, Glasgow; next at Muirkirk Iron and Coal Works; then my apprenticeship with Messrs. C. Girdwood & Co.; and Messrs. Murdoch and Aitkin, Marine and General Engine Works, Glasgow; afterwards at Muirkirk and Glengarnock Iron and Coal Works; Forrester's Marine and Locomotive Engine Works, Liverpool; Scott and Sinclair's Marine Engine Works, Greenock; branches of the Garkirk and Airdrie Railway; Glasgow Water Works; New Gas Works, Glasgow; Gas Works, Germany; Gas Works and Copper Mines, Canada; Gas Works and Works for Government and Marine Board, Tasmania.

3. What was the nature of your experience in Railway Engineering on the Garkirk Railway? I was superintending the construction of portions of Line.

4. Are you not aware that the sum put down for preliminary expenses in Mr. Doyne's comparison with Irish Lines, at page 5 of his Report, has been paid, or is now in course of payment, out of the public vote and public donations? I am; and by the Railway Bill I observe that the amount is to be repaid to the Government and the Subscribers.

5. Out of the capital, or out of first accumulated profits? Out of the profits.

6. Then, under these circumstances, has it anything to do with the proposed capital of £400,000? It will have nothing to do with the proposed capital of £400,000, but would be a much more legitimate charge against Capital than Revenue, as is proposed.

7. In your paper you have named a new wharf near Launceston. Do you find any reference to such a work in Mr. Doyne's Report? That is in addition to Mr. Doyne's Estimate.

8. Referring to the same paper, at what rate per acre do you put down your rate of compensation? £450 per mile; total, £500 a mile.

By Mr. Sharland.—9. Will you state, from Mr. Doyne's Report, his estimate of profit? Mr. Doyne, at page 7, estimates the total traffic first at £42,105 a year. Further on, at page 9, he states, "That the traffic which may be expected on it will produce, in a short time after its completion, nearly £70,000 a year; that the working expenses for the carriage of this traffic will not exceed £26,000 a year; and that, after defraying all working expenses, there will be a balance of at least £40,000 a year to pay interest and redeem the debt."

10. Have you made any calculations on that head? No; my reply yesterday recommended reference to Railways of other Colonies. In England, the working expenses average about 50 per cent.; in the United States, about 60.

11. Are you aware what per centage Railways in England and America pay? In America most of the Railways have paid. In England many of them pay only 2 per cent., and a very few 10 per cent.

12. You have stated in your Return that the cost of the Railway would be £485,900. Is that founded upon Mr. Doyne's Report? Yes; but I hand in a book, "Weale, on Railway-making," giving the cost of Railways in Germany, which shows that they have there been constructed at £5000 to £19,000 a mile; and a single line in America, at from £1600 to £12,000. I consider these sufficient to show that there are various ways of laying down Railroads to make them cost more or less than Mr. Doyne's estimate. I have further to add, that to these prices of American Railroads there is an *ad Valorem* Duty of 33½ per cent. on iron rails, while wages are 50 per cent. higher than in England.

13. Is it not usual, after an Estimate for a Railway has been made, to allow 10 per cent. upon the gross Estimate? I have always been accustomed to add 10 per cent. to Estimates. Most Engineers add from 5 to 10 per cent.

14. Do you find any such Estimate in Mr. Doyne's Report? I observe, in page 11, Mr. Doyne includes Contingencies, but the amount is left blank.

15. Is it not necessary, at the Terminus at Launceston, to have warehouses for the reception of grain and other goods? In America the Railways always have warehouses. I conceive there should either be warehouses or places for the storage of grain at the shipping end, or otherwise the grain must be hurried in when the ship is on the berth.

16. You have said that "large warehouses for produce and a new bridge will also be required at the Launceston Goods Station?" Do you find any Estimate for those works in Mr. Doyne's Report? I don't think he estimates for the bridge. He allows £12,000 for Stations on the Swamp, which I hardly consider sufficient for stations, warehouses, and bridge.

17. And in your Estimate have you included the amount for those works? I consider that the 10 per cent. which I allow for Contingencies would cover the expense of warehouses, bridge, and other extra works.

18. Do you disagree with any part of Mr. Doyne's Report; and if so, will you state it? My own opinion is, that the Railway Station at Launceston would have been more convenient and cheaper if in the Town rather than in the Swamp, the Railroad being brought through the streets. This would save the erection of warehouses and wharf, and would not interfere with the existing warehouses, which are almost all on sides of streets through which the Railroad might pass.

19. How far is the proposed Goods' Station from the Merchants' Warehouses? It is on the opposite side of the river, and going round by the present bridge might be nearly a mile or three quarters of a mile.

20. Is it not usual in laying out a Line of Railway to show the strata of the cuttings where they exist? Where it is intended to lease the Line in Sections, and to give it out in quantities of cubic yards, it is usual to bore or sink trial shafts. In similar works, where it is given out for a lump sum, as is proposed for the Deloraine Railway, it is not requisite to make such borings or trial shafts, when it is known the ground is rock,—the cutting in rock is less than in clay, and in part saves the Contractor from quarrying stone for ballast; much of the stone might also be used for culverts.

21. Would not the borings materially assist the Contractor in tendering for the work? They would afford him assistance.

By Mr. Doder.—22. Have you any reason to doubt that the Line proposed, and the mode of construction, will cost more than Mr. Doyne's Estimate? I consider Mr. Doyne can easily construct the Railway within his Estimate; he could put down a much cheaper Line, than he has estimated for between Longford and Deloraine.

23. Have you made an Estimate of the Compensation in purchasing property in Launceston to carry the Terminus where you have indicated? No; but I am of opinion it would go through the streets and Government land for an equal distance to the other Line.

By Mr. Dowling.—24. You are, I believe, well acquainted with the general line of country beyond Perth towards Deloraine? I know the country well, but I have not been actually over the Line.

25. Do you consider the country an easy Line for Railway construction? Very easy from Perth to Deloraine, with the exception of the bridge. But from Longford to Deloraine there would be no difficulty; in fact, it is a similar country to the Line in Canada called the New York and Montreal, along the banks of Lake Champlain, where the Line was put down complete at £3000 a mile.

26. Will not this very favorably affect the working expenses? Yes.

27. Will the additional works you speak of at Launceston, in your opinion, be absolutely required at the opening of the Line or otherwise? If the Goods' Station is to be fixed at the Bridge, and not below the Bar, the Wharf and Bridge will not be required; but still, unless warehouses were erected, the produce would have to be carted to the warehouses in Town.

28. Would not a horse-rail into the Town, at a future day, meet the probable requirements you now speak of? It would meet the requirements. It would be one of the works required at first.

29. Do you not think the sum would be very large for compensation, if the Line were to be diverted into the streets of the Town? I have never heard of compensation being asked for Lines going through streets.

30. Taking a period of thirty years, is your opinion generally favorable or otherwise to the decision which the Promoters have arrived at,—that if the Line is economically constructed and worked, as proposed, it will pay interest at 6 per cent. (i.e., £24,000), and working expenses (say) £26,000? I am of opinion that the proposed Railway will be of very great benefit to the District. By the Estimates and Statistics of the District, I conceive it will only pay a small amount of interest

for the first few years; afterwards, increased Revenue must depend very much upon increased population and of land in cultivation.

31. In your examination in 1860, in answer to the question "What effect had Railroads on Agriculture in Canada?" you replied, "It increased the population and extended Agriculture wherever the Lines were laid down, and doubled the value of the land in most cases, and even to a greater extent." Do you entertain that opinion still? Yes; and I am aware that the population of the large Towns of Canada have doubled within the last ten years, and the population of the whole Colony nearly so within the same time.

By Mr. Sharland.—32. Do you know at what period we may estimate any decay in the Sleepers receiving the Rail? This depends on the timber used. Some will last 6 or 7 years; others about 20. Good blue gum is the best, and would last for 20 years.

Mr. Falconer then retired,

TUESDAY, 12 AUGUST, 1862.

E. A. LA TOUCHE, *Esq.*, *Civil Engineer*, called in and examined.

By Dr. Butler.—1. In the Evidence which you gave to the Committee, page 4, you give an Estimate of working expenses. Was that Estimate an approximate one, or the result of calculation? It was the result of calculations.

2. Which items of that Estimate includes Locomotive expenses? Running and coaching expenses; viz., £9002.

3. Which item includes traffic charges? The same sum of £9002; by traffic charges I mean Station Masters and Porters only.

4. In your calculation, how much did you estimate as the cost of fuel per mile? 7·072*d*. I have estimated fuel at Victorian prices, £2 4*s*. 6*d*. a ton, at which price coal is bought for the Victorian Lines; and, taking their average of 30 pounds of coal to the Train mile: their consumption on passenger train is about 23 pounds.

5. In the item of Maintenance and Way, is not the principal item Wages for labor? It is.

6. Are you aware what is the expense incurred for maintenance of way in Railways in England and Ireland? In English Lines it has not come under my notice lately; but, from the last Half-yearly Report of the Midland Great Western Railway in Ireland, which is a double Line, and on which the traffic is very great, the cost of maintenance is £80 per mile per annum.

7. Are not working expenses proportionately larger on long than on short Lines of Railway? They ought not to be so.

8. In page 5 of Mr. Doyne's Estimate, in the item Rolling Stock, the sum of £682 per mile is put down. Would that item, in your opinion, cover the expenditure? I agree with Mr. Doyne in that part of his Report in which he says, "These will give sufficient power to work the Line in the beginning, but additions to their number will have to be made as the traffic is developed." That paragraph I see refers to Engines. I consider that £15,000 for carriages for passengers and goods will be ample for some years to come.

9. Of what character is the proposed ballasting on the Line? Gravel.

10. Is there any provision in the Estimate for broken metal? None.

11. Are the bridges on the Line to be constructed to carry a Double or Single Line? The bridges are estimated for a Single Line.

12. In your calculations of the expenditure for Works, at what amount did you estimate day labor, as to construction and maintenance of way? Have you made a calculation of the rate of wages? It was based on the last Schedule printed in Victoria for the Government Railway.

13. Are Rails at 70 pounds to the yard sufficiently strong to bear the estimated traffic? Amply so, provided the gradients be not increased beyond what Mr. Doyne assumes them to be.

14. Have you any experience in Railways of New South Wales? None, except from Government Reports.

15. Are you aware that for a proposed Line, the earthworks of which do not exceed 5000 cubic yards per mile, the extreme gradient being 1 in 100, the radius of the curve 30 chains, the estimated cost is more than £7000 a mile, no provision being made for Rolling Stock or Stations? The case you speak of has not come under my notice.

By Mr. Sharland.—16. In reference to your answer to No. 5 Question, page 2, were you present with Mr. Doyne when he made a geological examination of the country along the Line? I visited, in Mr. Doyne's company, the principal points of interest along the Line, and have frequently discussed with him the geological character of the Country; but I have not, in his company, walked over that portion of the ground at the back of the Cocked Hat Hill. I am aware, however, that Mr. Doyne has, on various occasions, visited the heavy cuttings and embankments in that neighborhood.

17. Who marked out the Line? The details of the field-works were done by Messrs. Guerin and Burke, Mr. Doyne having previously pointed out to them the route which they were to take.

18. Who made the original Map? The Field Surveyors plotted their own work in the Office.

19. Will you explain, so far as you can, the work done by Mr. Doyne? The work done by Mr. Doyne was that usually done by an Engineer-in-Chief. He originally examined the Country thoroughly. When he had satisfied himself as to the most generally eligible route for the intended Line, he engaged Surveyors, set them to work, and, wherever there was a doubt that the route selected by him was not the best, two or more Lines were surveyed and the best route taken. He checked the work by means of magnetical bearings, taken with compass on the ground, and the aneroid at all the principal heights. He collected a mass of information as to the present and future increase of traffic. He directed the Office work, giving me the principles and data on which he wished the calculations to be made. When these works were complete, he then wrote his Report. Such is the usual course of proceeding of all Engineers of standing.

20. Are you aware whether Mr. Doyne made any attempts to obtain a shorter Line between Launceston and Deloraine? I have often discussed that matter with Mr. Doyne. I believe Mr. Doyne's instructions were positive as to the route which the Promoters wished him to take; and I also believe that no Survey was made of the direct route. But I am aware that Mr. Doyne is of opinion that the direct route does not afford sufficient advantages to counterbalance the great defects which such a Line would possess.

21. Can you say how Mr. Doyne arrived at the conclusion that £50. per mile would be sufficient for land and compensation? By assumption, as Mr. Doyne expresses in his Report.

22. If Mr. Doyne's assumption, as contained in his Report, proves incorrect, would it not materially increase the calculation he has made? It would increase the item of land to some extent. It might double or treble it, but would not materially affect the cost of Railway.

By Mr. Dowling.—23. Did any one check the plotting of the Field Surveyors in the Railway Office? The first portion of the plan (8 miles) was checked by Mr. Doyne, and the remainder by me.

24. You have been asked by the Chairman as to the estimate for Rolling Stock. Do you consider the £30,000 put down by Mr. Doyne sufficient for Locomotive and other Rolling Stock for a larger traffic than that estimated? It is sufficient, with the reservations I have already stated respecting Engines, to working traffic twice that estimated.

25. Look at page 9 of Mr. Doyne's Report, under the head "Working Expenses," and inform the Committee if you agree with the last paragraph of this Section of the Report? The estimate which I have made, and which is given in my former evidence at £26,000 a year, is based on the supposition that twice the traffic will be carried on the Line to that estimated. In other words, I have based my calculations on the supposition that five Trains a day will be run on the road from Launceston to Deloraine. Two and a half would carry all the traffic at present estimated for.

26. In answer to a question by the Chairman respecting the construction of a Line at Sydney for upwards of £7,000; irrespective of Stations and Rolling Stock, how does this compare with Mr. Doyne's Estimates? I consider favorably, because I find, in Mr. Doyne's Estimate, Stations and Rolling Stock, at £1,082 per mile. If this be added to £7,000 a mile, it would bring it nearly to our own Estimates. I am under the impression that all Contracts in Victoria and New South Wales are let by Schedule Contracts. I am aware they are so in Victoria, and I believe so in New South Wales; but a Contractor will never be found to undertake a work on a Scheduled Contract at as reasonable a rate as for a lump sum.

27. *By Dr. Butler.*—How long will each Locomotive run after getting up steam? I assume that an Engine on the Launceston and Deloraine Railway will run only 88 miles, and that there will be Three Engines in daily use.

28. What is the number of miles an Engine will run without requiring repair? I cannot answer that question in that way. But in Victorian Railways each Engine is assumed to require £250 a year for repair, and I have assumed that amount to be the cost here; and I assume the life of an Engine at 10 years.

29. Can you state in detail the Estimate incurred in the workshop? I have assumed, that besides the General Managing Engineer, there will be under him a Locomotive Superintendent at £350; the workmen, such as fitters, are included in the £250 per Engine per annum.

By Mr. Douglas.—30. Can you inform the Committee, in explanation of your former evidence, what you consider to be the disadvantages of any more direct route out of Launceston than the one selected? Before leaving Launceston, I heard of a scheme which was mooted for a direct route to Deloraine, with branch Lines to Perth and Longford. I cursorily examined the country, and I am of opinion, as far as it is possible to judge without using an instrument, that the shortness of the direct route would not counterbalance the increased cost of the Line in passing through the range of hills of which the Windmill Hill is a spur. Moreover, supposing the cost was less, I consider this Line would run entirely away from one of the greatest sources of traffic, and that the gradients involved by it (say, 1 in 40 or 45) would be a source of extra expense, both as to cost of Engines, cost of Running Expense, and maintenance of Way, and wear and tear of Rolling Stock. For instance, it would be necessary to keep a Pilot Engine to take the Trains up such an incline, or to have Engines of large extra power. If to that we add the expense of the branch Line to Longford and Perth, the capital expended would be considerably larger than that necessary for the construction of the present route.

Mr. La Touche withdrew.

SIR RICHARD DRY, *Knight, called in and examined.*

By Mr. Douglas.—1. Do you know Mr. Doyne, the Engineer who reported on the proposed Line? I do.

2. Had you opportunities, during his engagement, of forming an opinion of his professional abilities; and, if so, what is that opinion? I met Mr. Doyne several times whilst he was engaged on the proposed Line of Railway. From his general intelligence, and his apparent perfect acquaintance with his work, I should have formed a favorable opinion of his professional ability; but, as I am not an Engineer, that opinion would be of no value were it not supported by evidence that he has been employed by the British Government in works of great importance, and that he has gained the confidence of some of the large Railway contracting firms, who, I believe, place perfect confidence in his Surveys.

3. Have you examined his Plans with his Report and Estimates; and, if so, what is your opinion of these, with reference to your knowledge of the Western Country? I have examined Mr. Doyne's Plans, with his Report and Estimates, and I do not think the amount of traffic in any case is overstated.

4. Have you had opportunities of ascertaining the present opinion of the residents and land-owners of the proposed Railway Districts? And have these opinions undergone any marked change during the past two years? I have. They are, with few exceptions, strongly in favor of the undertaking. For the last two years there has been a growing conviction that the Railway has become a necessity; and the cheap rate at which it can be constructed, as shown by Mr. Doyne's Report, has created an almost unanimous opinion that it will pay.

5. Can you inform the Committee respecting the present intermediate traffic in the Districts, and of its probable increase if a Railway were completed? There is now a considerable intermediate traffic in the Districts through which it is proposed to carry the Railway; but it is very much checked by the bad state of the roads, and the expense of transport. The construction of a Railway would cause an immense and immediate development of this traffic. Fuel is very scarce in Longford and throughout the greater part of the proposed line between Evandale and Launceston, whilst firewood of the best description abounds in the neighborhood of the Line. The greater part of the proposed District, between Launceston and Westbury, is destitute of timber fit for sawing or splitting, whilst beyond Westbury there is an abundant supply of both descriptions. Several parts of the Line abound in good freestone, which is now unworked. Lime of the best quality is found near Deloraine and lower down the Line, but the carriage is so expensive that inferior lime from Geelong is not only imported into Launceston, but is used to a considerable extent along the Line of Railway. I am opinion that, in two years after the opening of the Line, the intermediate traffic would not fall far short of the estimated through traffic.

6. Supposing the Railway completed, would it be practicable to find Colonial capitalists who would work the Line so as to cover working expenses and interest? I think it would. The close

enquiry which has recently taken place has convinced many that the undertaking would be highly profitable. I should have no objection to join in such an enterprise. But, on public grounds, I would recommend this course to be avoided, as I am persuaded that the Line may be worked so as to cover interest, working expenses, and a moderate sinking fund, at a much lower rate for carriage than that proposed,—a circumstance of which the public should have the benefit.

7. Have you given any consideration to the question, How far the construction of a Tramroad to the Mersey from the neighbourhood of Deloraine would affect the calculations of traffic made by the Promoters? I have. I do not think that the construction of a Tramway from the Mersey to Deloraine would materially affect the Railway traffic. It certainly would not reduce it. All produce for shipment to the neighboring Colonies raised between Deloraine and the Mersey would be carried by the Tramway; but as scarcely any of this enters into the present calculations they cannot be much affected by it. On the other hand, should other markets than those of Australia be opened, much of this produce would be sent by Rail to Launceston, Port Frederick being available for small vessels only. The passenger traffic would be increased, as many of the proprietors of Devon reside on the proposed Railway District and in Launceston. Many articles of local traffic would also be carried both by Tram and Railway. On the whole, I consider that the benefits of the Tramway would be greatly extended by the construction of the Railway, whilst those of the Railway would, in a less degree, be increased by the construction of the Tramway.

8. Is it, in your opinion, of grave importance to the interests of the Agriculturists in the Western Districts, the early construction of this Railway? I consider the early construction of the Railway as of the utmost importance to the Agricultural interests of the Western Districts. They have now to maintain a keen competition in the markets of Melbourne and Sydney with the farmers of Australia, fully believe that the facilities which the Railway would afford would enable them to do so successfully.

9. Is it not a fact that both landowners and tenants throughout, the District are most anxiously looking to its construction as a means of enabling them to compete with the Agriculturists of other Countries? Yes.

10. Is not the whole line of the proposed Railway through Agricultural lands? And what is your opinion would be the increase in value given to these lands by the construction of the Railway? Nearly the whole of the proposed line of Railway runs through Agricultural lands, generally divided into farms of from 100 to 500 acres. I have no doubt that its construction would not only avert the downward tendency of the price of land, but would cause an immediate and considerable increase in its value.

1. What do you think may be a fair average rate of compensation per acre for land throughout the Railway District? £10 per acre would be full compensation.

Sir Richard Dry retired.

THURSDAY, 14 AUGUST, 1862.

WILLIAM DODERY, *Esq., M.H.A., called in and examined.*

By Mr. Douglas.—1. You are acquainted with Mr. Doyne? Yes.

2. You furnished him with replies to certain interrogatories on the subject of local traffic? I did.

3. Do you still believe these replies represent the condition of the Longford District with reference to the said traffic? Generally, they do; but some reductions have been made in the charges, I presume from the cheap rate of forage.

4. What is the general sentiment in your District on the subject of the early construction of this Line? The general feeling is, that the early construction of the Railway would be highly beneficial to the community, and is much desired. Some few persons have appeared antagonistic, merely because of the route the Line is intended to take; but generally they admit the advantages of the Railway.

5. Are you aware of any matter respecting this question which has not yet been brought before the Committee, and which you may deem it desirable they should be made acquainted with? Yes. I would beg to state to the Committee, that the fact of there being 6 flour-mills in Longford and Perth would be a great support to the Railway Revenue, as they would be constant purchasers of grain, and open up as it were a new market to the Western farmers.

6. What do you think will be the results to the Agricultural interests of the Northern Districts if Railway communication is delayed? That the Agriculturists will have to continue struggling with the disadvantages of bad roads, high rates of cartage, compulsory sale of their produce, as I have before indicated, and without the hope of being able to compete with other Countries.

7. Are the present rates of cartage, as furnished by Mr. Nickolls, the usual carrier's charges? Yes; lower than usual. I have never paid less than 15s. a ton for coals from Launceston.

By Mr. Sharland.—8. You have stated, in No. 6 reply, that the Agriculturists have to struggle against bad roads. Is it not the case in all other parts of the Colony? Certainly.

9. Have you formed any opinion whether it would pay the interest of the money proposed to be expended, and the working expenses? I have only formed an opinion from the general Returns of Traffic, as set out in Mr. Doyne's Report.

By Mr. Douglas.—10. Do you not know that the traffic on the Western Road is very great, and much exceeds that of any other line of road with which you are acquainted? Yes, it does; considerably more than Longford.

11. Are you not aware that it is almost impossible to keep the Western Road in repair, in consequence principally of the very great traffic from heavy loaded drays and waggons? How many months in the year is it very bad? I am aware that the Westbury Road is in a very bad state, notwithstanding the great amount expended on it; it is bad for Five months in the year. In May or June the Roads get bad, and continue up to October. I observe, from the Traffic Return, that half the grain is conveyed to Launceston within Three months, which fully verifies my statement as to the difficulties which farmers are compelled to suffer from the bad state of the roads. I observe, from the Returns, that 505,000 bushels of grain were brought down on the Westbury Road, and of that quantity 225,670 bushels were carted down in March, April, and May, whilst the road is pretty good.

By Mr. Allison.—12. Would not your two last answers apply almost equally to any other Agricultural District of the Colony? Yes; as regards roads and prices generally.

By Mr. Sharland.—13. What is the cost of the conveyance of grain from Longford, Westbury, and Carrick into Launceston? From Longford to Launceston, per bushel, in large quantities, (say 1000 bushels of wheat) the usual charge is 3d.; in small quantities, it is 3½d. From Westbury to Carrick 2d. a bushels for oats, the distance being 11 miles. I do not know the general rates.

14. Supposing the cost of carriage to be the same by Railway as by Horse Conveyance, do you believe that the Railway will always be preferred? Certainly. You can get it in more expeditiously and in larger quantities. I could send down wheat from my farm (say 1000 bushels), and it would go down at once. Now it is stored by the carters, and it takes a week or a fortnight to go to Town. I may also mention, that I have sold wheat for Sydney. By delivering it on board I get a penny, two pence, and even three pence per bushel more. I am a large producer. A small grower would not have all the advantages, but the millers and merchants would give him better prices, as they would take the advantage of the market. I know growers who store their grain in Town to avoid the bad roads, and also to meet any sudden demand from a merchant for a quantity for shipment. The grain could now be retained in the farmers' own barns.

By Mr. Douglas.—15. Have you received from Mr. Hyrons a Traffic Return of the Coaching between Launceston and Longford? Yes; I wrote to him to furnish the information for the Committee. His coach runs in and out six days a week. His traffic is 364 passengers a month. Mr. Tankard's conveyance takes about a third less, or (say) both together about 607 a month, equal to 7,284 a year. If that be estimated, as usual in Railway traffic, at three times as great, it would give 21,852. I don't think this is more than one-third of the traffic which actually takes place. The fares inside from Longford are 4s., and outside 3s., the distance being 15 miles; by the proposed Railway it will be 16 miles.

16. Would not a Tramway to the Mersey very much reduce the traffic by Railway to Launceston? I don't think it would. I think a Railroad would give increased facilities.

A. F. ROOKE, Esq., M.H.A., called in and examined.

By Mr. Douglas.—1. Did you furnish replies to certain interrogatories furnished by Mr. Doyne? Yes.

2. Do you still adhere to the statement then made by you? As Chairman of the Meeting I merely recorded the opinion of the Meeting, but I do not agree upon the whole. I object to the 6th paragraph.

3. Are you aware of the cost of keeping the Western Line of Road in repair? Between £5000 and £6000 a year.

4. Does that sum keep the road in proper repair? No; certainly not. The road re-made last year is now as bad as ever.

5. Do you consider the proposed Railway, if made, would be beneficial to the inhabitants of the Western Districts and to the Colony generally? I do.

6. What opinions are generally entertained by the Inhabitants of Deloraine and Westbury Districts as to the proposed line? Generally speaking, (indeed it is the exception of any one being opposed to it), the inhabitants are most anxious for its construction; and indeed all down about the Don, Mersey, and Devon Districts are much in favor of it.

7. What is the cost of cartage from Deloraine to Launceston? From Deloraine to Launceston the cost is 8d. for wheat, and 5d. or 6d. for oats.

8. Would the Tramway to the Mersey, in your opinion, be beneficial or not to the Railway? I think it would be beneficial.

By Mr. Sharland.—9. You have said a Tramway from Deloraine to Port Frederick, on the Mersey, would be beneficial to the Railway, will you state in what way? In the first place, of the large quantity of land, both private and crown, in a state of nature at present, much would be brought into cultivation, and a considerable part of the produce will find its way to the Railway, as it would find a market at Westbury or Carrick; they would, in fact, have choice of markets, and, as the land became reclaimed and got inhabited, it would increase the traffic. I believe it would add considerably to the traffic of the Railroad, as most of the inhabitants travelling from the Devon District, which are rapidly increasing, would come by tram and join the Railroad at Deloraine instead of going by water; and much produce, such as coal, &c., would come up to the interior by the tram and Railroad. The Railroad would open the whole of the Colony to the people on the Coast.

10. Are you aware that grain can be carried from Port Frederick to Melbourne at 7*d.* or 8*d.* a bushel? Yes; it can. I paid 6*d.* for oats, I think.

11. Is not the best market for grain found in Melbourne? I should be very sorry to ship to Melbourne on my own account; but undoubtedly the large proportion finds its way to Melbourne through Commission Agents.

12. Then, if grain could be conveyed to Port Frederick at a small cost, would it not be the cheapest mode of sending it to Melbourne? If at a small cost, of course it would.

By Mr. Douglas.—13. Would not the Railway be very beneficial to the Agriculturists in your District, in enabling them to store grain in their own granaries, instead of being now compelled to store in Launceston? No doubt of it.

By Mr. Sharland.—14. Your answer is as a large grower of grain; would it equally apply to a small farmer having small means? Yes.

15. Would the Railway pay the undertakers? It would.

By Mr. Douglas.—16. Are not the Sydney and even Hobart Town Markets frequently better for Agriculturists than Melbourne? Yes.

A. DOUGLAS, *Esq., M.H.A., called in and examined.*

By Mr. Allison.—I observe you have a large area of land included in your proposed Railway District which will be liable to assessment. Are you aware if notice has been given to the proprietors of such lands that they may be liable to be assessed from the Railway? It has not. It has only been given to those parties through whose land the proposed Line would actually pass, or in its deviations; but Public Meetings have been held in all the Road Districts through which the Railway passes, and at those Meetings all parties have been made acquainted with the principles on which the assessment was proposed to be made. At Launceston there were two Public Meetings. At Evandale, Longford, Perth, Deloraine, and Westbury, Meetings were also held; and at each of those places a Plan showing the Road District as shown in Charts from the Survey Office, and also the Plan of the Railway, as submitted to this Committee, were exhibited. I can only say, that every publicity possible has been given to all parties in the matter, by advertisements in the newspapers, &c.

TUESDAY, 19 AUGUST, 1862.

JAMES SCOTT, *Esq., Surveyor, called in and examined.*

By Mr. Sharland.—1. Your name is James Scott; you are a Surveyor, and you reside in Launceston? Yes.

2. Have you examined Mr. Doyne's Plan for a Railway between Launceston and Deloraine? I have. I have not passed along the Line since it has been marked, but I know all that part of the country, having previously surveyed the whole of it.

3. Can you state what quantity of Crown Land will be benefited by the Railway, (*i.e.*, raised in value,) within the several Road Districts comprised in the Railway District? About 8,000 acres; and of Township lands there are 605 acres in Perth, Longford, Deloraine, and Westbury; and in Launceston Swamp 308 acres.

4. Can you state the quantity of land contained in the Railway Districts? I could not say. On the 13th August, 1860, I gave a memorandum of 179,320 acres of good land to the west and south of Longford and the Railway, for sending produce to that Railway.

5. Can you state the number of Roads to cross by the present Line of Railway? I have put down a number of them; 51 crossing places, not including small crossings to farms, but including the streets in Townships.

6. Can you give any estimate of the compensation to be paid for crossing private lands by the Railway? The amount of compensation would, in some places, be much greater than Mr. Doyne has inserted in the Estimate. I should say about £500 a mile. That is not for value of the land only, but compensation for dividing the lands, and for the works thereon.

7. Can you, from your own knowledge, suggest any better Line for the Railway? Admitting you take the same gradient as in England, I could suggest a Line to shorten it by 15 miles, and one which would be of greater benefit to Deloraine, Westbury, Carrick and Hadsphen, and of equal benefit to Longford, *i.e.* provided a gradient of 1 in 40, as in England, is allowed.

8. Within what distance of your proposed Line would the land be benefited? Near Launceston it would not be much benefited; but about ten miles onward it would extend out about 5 to 10 miles on each side.

9. Will you look at the Map of Mr. Doyne's Railway District, and state whether all the land there represented would be benefited by the Line? All the portion to the N.E. of the North Esk River would receive no benefit. The greater part of the North Esk Road District on the south side of the North Esk, and to the south west of the first ten miles of the Railway, would be in the same position.

10. Do you perceive any Crown Land in those Districts that would be benefited? There are only about 300 acres about Quamby's Brook, to the S.E. of Deloraine.

11. Is there any in the eastern portion of the District? None.

12. Can you state where the limestone is which is alluded to in Mr. Doyne's Report? There is a limestone quarry just about 4 miles S.E. from the terminus of the Railway at Deloraine: it is worked at the present moment. On 640 acres located to Robert Manley, and now belonging to me.

13. How is that now conveyed to Launceston? By bullock trains along the Westbury Road, at about the same price as grain,—8*d.* a bushel. Mr. Doyne's estimate is 8½*d.* for wheat from Deloraine. He takes the cost of driving 1000 sheep at £92 1*s.* 8*d.*; 100 head of cattle at £55. A butcher told me he could drive a 100 head of cattle for £6. I believe 1000 sheep would cost £30 at the utmost. The cartage of wheat from Deloraine is now 8*d.*; from Westbury, 6*d.* Potatoes from Deloraine, 30*s.* a ton; from Westbury, 20*s.* Mr. Dean has given me these prices.

14. What is the distance from the limestone quarry to the terminus at Deloraine? The nearest way is about 4 miles; the road is bad, being only a bush track. I cannot say what will be the cost of carrying it to the Railroad.

15. Will you state the number of acres in the Police Districts of Longford, Launceston, Morven, and Westbury? There are 1,449,000 acres stated in one of the Reports, but that represents a square of 47½ miles; but this is far in excess of what I estimate will be affected by the Railroad.

16. Do you believe that those 1,449,000 acres are contained in the Railway District? They may be contained in the Railway District, but the land would not be benefited to such an extent, or anything like it. I made a calculation of 184,320 acres, being the available good agricultural land, and which would be affected by the Railway.

17. In looking over Mr. Doyne's Report, have you any other information to give to this Committee? I have made out from Mr. Doyne's Estimate of Revenue and Expenditure from the Railroad, and I make a deficiency of £12,000; and that is only taking it at 44½ miles of permanent way, whereas the distance is 47 miles of permanent way. He has made no provision for crossing farms; and also Mr. Doyne puts down the population at £30,000 at least, while in the Railway District I only make it £26,055 including children, and also the District of Selby.

18. There is a letter from you to the Deputy Commissioner of Crown Lands in 1860; have you any remarks to make in respect to that statement? I have no statement to make, but to confirm it. I see no reason to alter it.

19. You stated that you are aware of a shorter Line for a Railway between Launceston and Deloraine; would it be less expensive than Mr. Doyne's? It would be shortened, and would therefore be less expensive: one would be as easy as the other, according to the distance, and would answer quite as well for traffic.

By Mr. Maclanachan.—20. Can you reconcile the difference between your calculation for compensation to persons injured by the proposed Line dividing their property and that of Mr. Doyne? Mr. Doyne, in his Report, says he expects people will give their land for nothing. I know that many will not give land without compensation, both for land and damage.

By Mr. Sharland.—21. Have you any remarks to make to the Report of the Sub-board of Works now read? I have no remarks to make upon this Report.

By Mr. Douglas.—22. You have said that if we take gradients of 1 in 40 you can suggest a shorter Line than Mr. Doyne's? Yes.

23. Can you state from actual observation, by instruments, if you can obtain so a good gradient as 1 in 35 or 40? Not by instruments.

24. What curves would your Line involve? Radius of 15 chains in place of 20.

25. Is that opinion formed from actual observation by instruments? Not by instruments.

26. Have you ascertained what difference in the power of the Engines; and what, in the weight of Rails, would be necessary as between gradients of 1 in 70 and 1 in 40? I have not. I am told that in England one is as cheap as the other.

27. Have you any idea of the extra cost per mile of your Line, involving 1 in 40 gradients? I think it would cost no more per mile.

28. Can you positively state that the Line you suggest is even practicable in an engineering point of view? I consider it is.

29. Do you say that as an Engineer? No, but on my own experience as a Surveyor.

30. Is not a large portion of the Line proposed through very rocky ground? It is not rocky; it is more gravel. It would run from Waddingham's old public-house on the Westbury Road through part of Bransgrove, Drummond, and Oakden's lands behind Penquite, and sloping down to the foot of the hill towards Cimitiere-street.

31. Where would be the highest point of that Line? At Waddingham's old public-house.

32. What is the distance from Cimitiere-street to that point? Four miles and a half at the least.

33. What is the altitude of Waddingham's house above Cimitiere-street? I calculate it at from 500 to 528 feet.

34. To make your Line, you must make a gradual ascent the whole way? Yes, you can find a gradual ascent nearly all the way. Taking the 4 miles at 1 in 40, just makes 528 feet.

35. Between Cimitiere-street and Waddingham's is not the land mostly building allotments and garden ground? It is building and garden ground out to the Main Road; but after that, it is mostly bush land.

36. What is the character of the country beyond Waddingham's to Carrick? Very poor land generally, and stony some of it.

37. Would not your proposed Line shut out from the Railway all the traffic from Perth, Evandale, and the Nile, and to the southward and eastward of these points? Yes.

38. Can you give the number of road crossings on a mile of Railway in England or Victoria? I cannot.

39. Will you compare Mr. Dean's price for carriage with Mr. Douglas's, in the printed paper, and state if you are aware that the prices given by Mr. Douglas are the ruling average prices or otherwise? Wheat is 1*d*. higher, the rest is just the same.

40. When did Mr. Dean give you his statement, and what is the date of Mr. Douglas's? Mr. Douglas gave his in July 1862, Mr. Dean in June.

41. You have stated that certain lands in the Road Districts, through or near which the Railroad will pass will not be benefited by it. Will you explain what you mean? Commencing at Launceston, my ground, the late Mr. Dry's ground, all the Patterson's Plains Road District, the White Hills, Kerry Lodge, and the Cocked Hat Hill, and north west of Perth, also at Carrick and Hadspen, derive no benefit from the Railway, so far as sending goods by it.

42. You have said that the limestone which may be expected to be carried by Railroad will have to be carried $4\frac{1}{2}$ miles over a bad road. Is it not the case that whatever lime is now taken to Launceston has to be conveyed over this Road? Yes, it has.

43. Are there not other limestone rocks within a few miles of the proposed line of road? Not to my knowledge; this is the only one worked, that I know of, nearest Deloraine.

44. You have said Mr. Doyne has made no provision for making crossings at farms. Will you look at the items of Estimate at the end of his Report, and tell the Committee what you regard to be comprised in the terms "7 turnpike road, level crossings," and "60 public road and occupation crossings"? In the items of Estimate he has put no sums opposite to these. I go by the Estimates at page 5.

45. You have objected to Mr. Doyne's conclusions respecting population which will be affected by the Line, and you state you make the number 26,055 persons. Are these the persons residing within the Districts through which the Line is to pass? I will give you the Districts which I took:—Ringwood, Norfolk Plains,

Morven, Selby, Launceston, Westbury, and Deloraine, which, by the Census, have a population of 28,836. Deducting Selby, which is not at all benefited, it will reduce it to 26,055.

46. Do you mean that the Selby people will not travel by the Railway? I don't think one of them scarcely, except from a little piece in the marsh, they could not get to it.

47. Suppose a bridge to be erected at the North Esk, at Tucker's Mill at Patterson's Plains, with a Station opposite, would not the people travel by Railway? They might travel by Rail, but would not send their goods. It would be up a hill and down a hill to the Station.

48. Would not these people use the Railroad to communicate with other Districts to the southward and westward? Yes; if they had occasion to go to the west or south they would travel by it; but all the produce has to go to Launceston.

49. Are you not aware that a Railway always favorably affects residents far beyond the Line? I have no doubt it would near the Line, not far.

50. Are you aware that passenger traffic is the most remunerative to a Railway? The passengers would be so few here I cannot say. I am not prepared to say. I have not had experience.

51. What Railways in England have gradients of 1 in 40? On the East Lancashire Line it is 1 in 40, with curves 15 chains radius. It carries goods at three farthings a ton per mile, and passengers for less than a penny.

52. Do you know of any other? I know of no other; but I am told that in some short distances they rise 1 in 24, with radius of 12 or 14 chains.

53. Are these worked by stationary Engines or by Locomotives? By Pilot Engines. The East Lancashire runs about 12 miles per hour.

54. Do you understand the difference between a Pilot Engine and a Locomotive? I know no difference. They both go ahead.

55. What experience have you had in Railway Engineering? Only reading, and seeing Tramways in the Colony.

56. Have you ever seen a Railway? And, if so, where, and under what circumstances? I saw a Railroad at Dalkeith before I left Scotland, in 1831, taking coals from the Pits to Leith or Edinburgh.

57. Did you ever see a Passenger Railway? There were some men on the Trains. I have never seen a Passenger Train. This was for Coals.

58. Was that at Dalkeith a Locomotive or Horse Railway? It was drawn by horses.

59. What is your distinction, then, between a Railway and a Tramway? When made of iron, a Railway; when made of wood, a Tramway.

60. You have stated that you have land which must be taken for the proposed Railway. How much land would be taken, taking the width at one chain? Taking the distance at a mile in length, it is just 8 acres.

61. What value do you put on that land per acre? £50.

62. Must not the parties affected by the Railway take compensation under "The Lands Clauses Act? Yes; but not compensation for land only, but for injury done as well, and severance.

63. How do you make up your calculation at £500 a mile throughout the Line? I take my piece of land as an illustration. It is leased to two tenants: it is a marsh, and they must have proper crossing-places, and the Railroad would be raised 6 feet above the marsh; at that place there must be proper approaches to cross over. The tenant is liable to guard the gates, and shut them to keep in his cattle, horses, &c.; and I consider this a great injury, because the servant is liable, for damage or accident to the Railroad, or gates even, according to Clause 33 of the Act, to an amount not exceeding £20.

64. Are you not aware that many landholders have offered to give their land? I am not aware. Mr. Gleadow, as Agent for Mr. Dry, will demand the highest; also Mr. Lawrence, Mr. Stewart, Mr. Peck, and some others at Perth: Mr. Joseph Clayton, at Perth, has told me so.

65. Are you not aware that much opposition has arisen to the proposed Railway because the Line is not extended towards Cressy? No. The opposition is in consequence of asking that the land may be subjected to the guarantee; and also the portion of Launceston, which is now the business part, will be entirely thrown out and ruined.

By Mr. Maclanachan.—66. You state your proposed Line would shut out the traffic from Evandale, Upper Nile, and Perth. Would it secure a traffic shut out by Mr. Doyne's to make up the difference? It would secure the traffic for Longford, and a little more from Carrick, and also Mrs. Brookes from the Meander.

By Mr. Dowling.—67. In the Report of the Northern Board of Works read just now, you complain of a statement made by Mr. Dowling in 1860, in which the quantity of land was given at 80,000 acres. Was not this statement made on a Return given to the Promoters by yourself on the 13th August, 1860? It was.

By Chairman.—68. Do you believe that the proprietors of land between Launceston and Perth would convey their grain or other produce by the Railway? Some of them immediately on the Line; but a great portion would not,—all from the Cocked Hat.

Mr. Scott withdrew.

WEDNESDAY, 20 AUGUST, 1862.

JAMES SCOTT, *Esq.*, Surveyor, again called in and examined.

By Mr. Sharland.—1. In reference to the proposed new Line of which you have spoken, can you inform the Committee whether, if found practicable, you have made any calculation with respect to time as compared with Mr. Doyne's Line? Suppose the distance to be 44 miles,—at 30 miles per hour it would take $1\frac{1}{2}$ hours; and there are 7 Stations on that Line, which, at 3 minutes to each, would amount to 1 hour 50 minutes. Then the short Line, supposing the steep incline to be 5 miles, at 10 miles per hour, would take 30 minutes; the other 25 miles in length, at 30 miles per hour, would take 50 minutes; and stoppages 10 minutes,—would amount to 1 hour 30 minutes, thereby gaining a saving of 20 minutes.

2. Are you acquainted with the land on the north of the Meander? Yes, I know it, and the present roads.

3. Are there large growers of grain in that vicinity? Mrs. Brooke has a number of tenants who are great grain growers.

4. What line of road would be most convenient for them to convey their produce to Launceston? They come on to the Main Road a mile and a half to the east of Carrick, near Launceston.

5. Supposing Mr. Doyne's Line of Railway to be formed, would that be convenient for them? Not by his Line, because they would have to go several miles directly away from Launceston before they came to a Station, and then they would have to send in 24 miles from the Station, while by the common road it would not be above 10 miles to Launceston.

6. Do you know where Mr. Doyne's Line crosses the Liffey? At a grant to Collicott, near Bishopsbourne. It crosses the road from Bishopsbourne to Carrick about 3 miles from Carrick.

7. Would your proposed Line of Railway be more convenient for the growers of grain at Carrick, Hadsen, and north of the Meander, than Mr. Doyne's? Yes, it would just answer for them.

8. Can you give any other information to the Committee in respect to this subject? (Mr. Scott hands in the *Engineer* newspaper of 20th June, 1862, and reads as follows:—

"In Chili there are now 289½ miles of Railway open or ready for use. Upon these Railways exist features such as are rarely to be met with upon any Lines in the world; as, for instance, upon the Valparaiso and Santiago Railway is an incline of 1 in 45 for 12 miles in length, combined with curves of 600 feet radius; the summit level of this Line will be 2650 feet above the sea; and upon the Charcarilla Line is an incline of 1 in 25, 9 miles in length, with curves of 500 feet radius, up which English Engines ascend daily to an altitude of 4000 feet above the sea,—an altitude not previously attained by the Locomotive.)

By Mr. MacLanachan.—9. Does your Line present greater engineering difficulties than Mr. Doyne's Line? And if so, at what cost do you suppose per mile? None, except the incline, that is all; only in the gradient.

By Mr. Sharland.—10. Have you ever traced your proposed Line from Waddingham's to Deloraine? I have gone along the Road, and traversed it. It is all visible there.

By Mr. Dowling.—11. You have stated that Carrick is about 3 miles from Mr. Doyne's Line. Suppose a Rail were laid down from Carrick Township to the Station, would not this afford great facilities to the grain growers at Westwood? It would afford facilities; but then people would have at least a mile and a half to travel to Carrick, then 4 miles by Rail, and 24 miles to Launceston; whereas by going on the Main Road they would only have 10 miles to go to Launceston.

12. Are you not aware that in England and America markets for produce usually grow up at or near the Railway Stations? I cannot say from my own experience.

13. Would not a very large traffic in passengers and goods coming along the Main Line of Road at Perth be wholly lost to your Line? Entirely.

By Mr. Balfé.—14. Is an increase in the area of cultivation, and the great extension of Railways, in the neighboring Colonies, likely to interfere with our future exports of agricultural produce? I should say if they increase they would interfere with our produce.

15. Do you think it is likely that the Agriculturist living in the Railway District can compete in their own markets with those of Adelaide, Victoria, and New South Wales? They could not with Adelaide, nor Victoria, but they could with New South Wales.

16. Could wheat and oats be profitably grown and exported at 4s. 6d. and 2s. 6d. a bushel? Mr. Alexander Stewart, who farms his own ground, tells me it is impossible, and that he is losing money by it.

17. Are you aware that the two last shipments of wheat from Adelaide to London realised 5s. per bushel nett? I cannot say.

18. Would it be practicable to connect the Districts of Westbury and Deloraine with a more convenient and cheaper port of export than Launceston? I dare say they might connect Deloraine with the Mersey both cheaper and shorter. It is practicable.

19. If ever a direct Line of Railway between Hobart Town and Launceston was to be opened, would the proposed Line between Launceston and Deloraine detrimentally affect such a project? No: it would be assisted, as far as Evandale and Perth. If the Line came by the Macquarie it would join it at Longford, but if by the South Esk it would join near Evandale or Perth.

By Mr. Dowling.—20. Are you aware of the distance from Deloraine to Torquay? 30 miles 25 chains; Latrobe Township is about 4 miles less,—it is at the head of the navigation.

21. With reference to the relative condition of the Agriculturists of Victoria to this country, do you not think that the latter will be most injuriously affected in the market, even at Launceston, if the Victorian farmers enjoy the advantages of Railway communication, whilst these are denied to our farmers? I am not in a position to say. I have never been in Victoria, and cannot say what the effect would be.

Mr. Scott withdrew.

MR. JOHN GREEN, *called in and examined.*

By Mr. Sharland.—1. Your name is John Green, and you are a Toll Collector of the Prospect Toll-gate, leading to Westbury? Yes. On the 1st January, 1861, I ceased to be Collector at the Gate.

2. Were you requested to keep an account of the traffic? I was. The last account I gave was from 1 June, 1859, to the last day of February, 1860. I left the Gate on the last day of December, 1860.

3. How did you keep that account? I kept it by writing on a slate, and had a column for each item, the different loads of grain, passengers, and goods, inwards and outwards, during the day. The next morning I added up the previous day's traffic, and put it on a sheet of paper on a form in writing, and gave it in every month to Mr. Dowling.

4. How did you take an account of passengers? The number of passengers on the coach, not including the coachman and guard, also the number of persons in the vehicles passing through, not including the drivers of public waggons.

5. Has the traffic increased or decreased since you left? I believe the heavy traffic has increased, but the light traffic has decreased.

6. Will you state the sum realised in one year by the Gate? For the last year I was there I cannot say from memory.

7. What did you pay for the Gate? I paid £630 a year rent for it. My gross taking was over £800 for the year 1859.

8. Can you state the traffic at the Entally Gate? I cannot say. It was rather less, in consequence of other roads coming on to the Westbury Road between Entally Gate and Prospect Gate.

9. I presume you were paid for your trouble in keeping accounts of the traffic? I received £25 for keeping the account for 12 months.

By Mr. Dowling.—10. Look at the Form now given in, and say if that is a copy of the Form furnished you to fill in the traffic? That is a similar Form.

By Mr. Douglas.—11. If you have made any errors in your Return, do you think the errors would be omissions, or in giving too much? Omissions, in giving too little; I am confident of it.

12. How many years were you at the Gate? Six years. I was lessee for five years, and paid a higher rent each year. For the first year I paid £605; for the second £600; for the third £620; for the fourth, I forget; for the fifth £630. I am aware that it now fetches £720.

13. Was there a gradual increase of traffic during that period? There was.

14. Do not the two gates, one on the Main Road and the one at Prospect on the Westbury Road embrace the principal traffic in and out of Launceston? They do.

By Mr. Sharland.—15. Did you make a solemn declaration as to these Returns? I did.

By Mr. Dowling.—16. When I first engaged you to make out the returns of traffic and passengers, what instructions did you receive from me as to making them up? In the first place, you gave me a Form, and instructed me to ascertain the number of loads and bushels of grain, of passengers, &c., and also of sheep and cattle, &c.

17. Were you not told to be very careful in making this Return? I was.

Mr. Green withdrew.

TUESDAY, 26 AUGUST, 1862.

DONALD CAMERON, *Esq., J.P., Fordeu, Evandale.*

By Mr. Sharland.—1. Are you aware that a Railway is contemplated from Launceston to Deloraine? I understand so.

2. Would you be affected by the Railway? I would, prejudicially. I would be assessed with others for a work in which I have no interest. I find the District of Evandale would be formed into one of the Railway Districts, which I consider would be gross injustice. I would also think it injustice that the whole Colony should be taxed for a work,—I should say purely local,—to enrich the Westward landholders and the City of Launceston. I look on it as a most visionary scheme; and, in conversations I have had with many thinking men, they agree in my opinion. The farming interest I consider in a state of bankruptcy on the other side of the Island,—I mean the small farmers,—many of them mortgaging their crops, or, in other words, taking advances on them before they are reaped, and sometimes before they are sown. I do not think they could support a Railway under those circumstances.

3. Will you state why it would be gross injustice that the Railway should pass through Evandale? Inasmuch as I, with others, would derive no benefit whatever from it.

4. Will you state why you would not derive any benefit from it? Inasmuch as I would neither send wool, grain, nor stock by it, and I would be taxed for that which would not benefit me and others.

5. Do you mean that you could convey your grain and wool at less cost? Infinitely. No Rail can carry wool so cheaply (*i.e.*, taking the Tariff) as my own teams. It does not cost me, sending 2½ tons of wool (one load) 21 miles, more than 8s. of actual disbursement; nor do I think any individual, from the Break-o'-Day downwards, would unload their waggons and send from the proposed Station at Evandale—a distance of 8 or 10 miles. Those parties usually take return loads from town. There would be an actual loss, and no saving; and my opinion is, further, that little wool would be sent by Rail from any part south or south-east of Evandale.

6. Can you state whether the opinion you have expressed in answer to the last question is the general opinion of your neighbors and the settlers up towards the Break-o'-Day River? It is the opinion of many of my neighbors; but I have not had an opportunity of speaking to many of the Break-o'-Day wool-growers.

7. Then it is your opinion that the settlers about Evandale and the Break-o'-Day River would not be equally benefited by the Railway as Deloraine and its vicinity? Certainly not. At the same time, those to the north of the Railway would take advantage of it; but most decidedly Morven, or north of Evandale, would not derive so much, if any, benefit. Some few would take advantage of it. The north is between the Cocked Hat and the proposed Railway Station.

8. Are you prepared, by any calculation, to state whether the Railway would be a paying undertaking? I cannot; though my opinion is that it will not be a paying speculation.

9. The scale of charges for cattle and horses and other articles of traffic being now before you, will you give the Committee your opinion upon those charges? Cattle and horses I consider entirely in excess. I could, for instance, send 25 head of cattle to market for 10s. irrespective of tolls, and I find the cost by Railway would be about £6 13s.; and I could send a larger number (100 head) for 15s.—this would require two men; by Rail they would cost £26 12s. I think wheat, per bushel, is now carried from my house, 21 miles, at 4d. a bushel,—I speak under correction; this would be 12s. 4d. a ton. By Rail it would be 11s. 3d. a ton at 6½d. per-ton per mile.

10. In reference to that calculation, how far would you have to convey your grain to the Railway Station? About 12 miles from my house—from 10 to 12 miles, supposing I send my grain to Launceston by Railway.

11. Would the Station proposed be a convenient one for your District? I should say it would be a convenient Station; but if the Railway is ever carried out, the Station ought to be at Evandale, or it will destroy that Township completely; simply because we find that, wherever a Railway passes, the trade is drawn to the lands contiguous to the Station. And a large opposition to the Railway from the Evandale people is owing to their belief that it will destroy the Township.

12. I believe you signed a Petition against the proposed Railway being carried out? I did.

13. Are your objections to the Railway founded upon the statement you have now made? Generally, they were; though I had not the drawing up of the Petition. My reasons for signing it were the views I have now expressed.

14. Have you any further observations to make respecting the Railway, on account of yourself or others? The western farmers and Launceston, and the line of country through which it is to pass, are in favor; but, generally speaking, those not interested in it look upon it as a hollow scheme, and that it will not pay. I would instance a number of people in Carrick, who, I understand, are opposed to it. I should imagine that the people of Torquay would be opposed to it. I find, in Mr. Doyne's Report—"That a large development of traffic is to be expected, I cannot doubt; and the opinions of those gentlemen who have given me the benefit of their local knowledge and experience are most strong upon the subject. Admirable stone, lime, and it is believed slate, for building purposes, are plentiful near Deloraine and Westbury, and will command a certain market through the whole District, when they can be carried at a reasonable price and in quantities sufficient to keep in operation quarries large enough to be remunerative. In a country abounding in fine timber, it is only necessary to be reminded of its value when brought to market to perceive that that which is now destroyed merely to clear the ground will become a large source of traffic on the Railway. Agriculturists will purchase lime and manure, and will find a sale for crops and produce that at present would not pay for production and cultivation, but which the Railway will carry to market cheaply, and in good condition; and passenger traffic would very largely increase when the rapidity and certainty of the Railway make travelling easy and pleasant, whether the errand be one of business or recreation; villas will arise in the picturesque neighborhood of some of the Stations nearer to Launceston, and the same scenery will attract holiday folks when the Railway makes that scenery cheaply and quickly accessible. All these things tending to a development of traffic scarcely to be believed in unless supported by the experience of all Railway time. Out of this increased traffic will arise the system of season tickets and excursion trains, affording by the reduction of fares a direct bonus to the regular customers of the Railway." The first two paragraphs I should think very doubtful to base a Railway upon. To the following paragraphs it is a pity Mr. Doyne had not added the Cremorne Gardens,—a population of 30,000 people, all rich; while in Launceston there are numbers who are unable to pay their butchers' and bakers' bills. I consider this the outpouring of a very lively imagination. I cannot understand how, in a country like Tasmania, Railways can be made more cheaply than in any other Colony. I know a Railway in Scotland, 46 miles in length, going through a level country, and this Line barely pays its working expenses. It has been cheaply made, indeed the cheapest Line in Scotland, called the Forth and the Clyde Line. I think, if the Railway was calculated to be a productive work, there are capitalists who would willingly take shares; but I doubt if many have faith in it.

15. Do you believe that a Tramway on the same Line would be advantageous, and would pay for the outlay of capital? I could not say, not knowing the expense of a Tramway; but my belief is, that £600,000 will not complete the Railway,—and many agree with me on that point.

16. Can you form an opinion in respect to compensation to be paid for land per mile, and for other injury for trespass over the lands already subdivided? It would vary according to the quality of the land. I have paid £10 an acre for land. I should say it would be unsafe to make a calculation at less than £200 a mile.

17. The Committee is then to understand that you object to your land being rated to maintain the Deloraine Railway? Yes.

By Mr. Dodery.—18. Why are the Carrick people opposed to it? I understand the Carrick people object to it because it does not pass through Carrick. I have understood so.

19. Does not the objections of the Carrick people apply in the same manner as do those of the Evandale Township? Naturally.

20. Where do the persons whom you have had conversation with adverse to the Railway reside; and how are they occupied? They reside in Launceston, in Morven, at Break-o'-Day, and in Campbell Town District. They are sheep and landholders, farmers, and men of business in Launceston.

21. Do you grow much corn, or fatten much stock? I do not grow much corn, but I fatten a large quantity of stock.

22. What time does it occupy your team in carting the load of wool you speak of, at a cost of 8s. actual outlay, men's wages, and wear and tear? Wear and tear is not included in the 8s.; this sum is the mere cash on the road. One man and 8 bullocks start at night, and return the next morning. This is the usual way of sending from our quarter. The 8s. includes tolls. The man has 3s. in addition to his wages; toll 1s. 6d., and a little hay.

23. Are you personally acquainted with the Western Districts, and the condition of the Roads? I am not.

By Mr. Douglas.—24. How many years is it since you were at Deloraine? Many. I cannot say. I dare say it is 20.

25. Does the fact of the small farmers being in a state of bankruptcy lessen the quantity of produce? Naturally; but I question, if the produce was taken from the barn doors, if they could afford to grow it at the late prices

26. Are the Committee to understand that the 3s. given to the man who takes in the wool referred to receives that in payment of rations from the time of leaving home until his return, and that the remaining 5s. goes for keep of bullocks and tolls? He gets his provisions, and 3s. in excess as a bonus.

27. Do you consider the cost for the land taken for the Railway would be more here than in England? I apprehend not.

28. Would not the Railway offer great facilities to the people of the Morven District in their communication with the Western country? Certainly; but I don't think there is much traffic between the two places.

29. Are not the people of Evandale and the small farmers of the Nile anxious for the construction of this Railway? I believe not. I obtained several signatures against it from that class of people.

30. Are you not aware that a very large number of these people have petitioned in favor of the Railway? I am not.

31. You have stated that you did not draw up the Morven petition. Did you not present the petition for signature of the parties to it? Yes; I did obtain signatures to it.

32. Are you aware that one of the parties to the petition you refer to has repudiated his act, alleging that he is in favor of the Railway going on? I am not. I know of one party who says, "I understand the opposition was against Morven being assessed. I don't object to the Railway, but I object to being assessed for what I have no interest in." Evandale generally being a pastoral district.

33. Is not that the general ground of opposition of the parties you represent? Many object on that, many more on the whole Colony being assessed for a purely local work.

34. Are you not aware that the majority of the Carrick people, and of Torquay and Port Sorell, have petitioned in favor of the immediate construction of the Railway? I am not aware.

35. Are you not aware that the Railway experience of England goes to prove that fat stock is now never driven wherever a Railway exists? That much depends on circumstances. I am aware that fat stock in England, being much more valuable than here, requires more care, and is generally sent by Rail.

36. To what circumstances do you allude? For instance, if I had to send fat stock to Hobart Town, 100 miles, and it would pay the cost, I would rather send them by Rail than drive them; but if I had a short distance to send them I would send them by a drover—such as 20 miles.

37. If the Railway can, soon after opening, convey wheat at $4\frac{1}{2}d.$ per ton per mile, or 37 bushels being carried from Evandale to Launceston for 4s. $1\frac{1}{2}d.$ or $1\frac{3}{4}d.$ per bushel, and at this cost delivered to the order of the grower in Launceston, would you not consider this an advantage? If it can be done.

38. Would you not regard the opinions of Sir Richard Dry, Mr. H. B. Nickolls, Mr. Dodery, and Mr. S. Henry, on the subject of the Railway and its probable intermediate traffic, to be deserving of general consideration? No; because they may be interested parties.

39. Do you not consider that the owners and occupiers of land beyond Westbury will be materially benefited by the Railway? Certainly.

40. You have stated that the Forth and Clyde Railway barely pays its working expenses. What is the official designation of this Line in the London Share List? This was when I was at home, in the end of 1861. It was then barely paying its working expenses. The title of it was the Forth and Clyde: it was from Stirling to Loch Lomond.

41. Have you not expressed it as your opinion that the condition of agriculture in this Colony is such, that the legitimate use of the soil is pastoral, and that the country is only desirable as a sheep-run? I would not say that. I consider that the land should be put to that purpose which pays best, whether that is agriculture or growing wool or flax, or any other purpose.

By Mr. Dowling.—42. Are you aware that the exports of Agricultural produce from Launceston have increased considerably since 1860? I am not aware; but, judging from what I see, I should say that there will be a falling off in the ensuing year, as I find a number of farms belonging to Mr. James Cox and others abandoned by the tenants.

By Mr. Sharland.—43. Is there much crown land in Evandale and the Districts towards Break-o'-Day? And, if so, would it be increased in value by the construction of the Railway? I believe that there is a very large amount of crown land; and it would not be increased in the slightest degree, as it is perfectly valueless. There may be a few thousand acres, but I speak of the aggregate. I confine my answer to the District of Morven. I am unprepared to say with regard to Break-o'-Day.

Mr. Cameron withdrew.

THURSDAY, 28 AUGUST, 1862.

W. H. CLAYTON, *Esq., Engineer and Surveyor, called in and examined.*

By Mr. Dowling.—1. You are an Engineer and Surveyor? I am.

2. What has been your experience? Commencing from my Articles,—I was articled to Mr. Lapidge, Parliament-street, London, who was for 30 years Director of Public Works in the County of Surrey. When out of my time, in 1845, I entered the employment of Messrs. J. & E. Birch, Civil Engineers, and in 1845-6 assisted in preparing the following Railways for Parliament:—Welch Line, Rueban to Chester, with branches to Llangollen and Mold, Chipping Norton to Banbury, Salisbury to Swindon, Oxford to Southampton. During the latter part of that engagement, and in the absence of the principal, I had the management and direction of the Staff. I had also a great deal to do in the office work, such as plotting, taking out the quantities, &c. The late Mr. Robert Stephenson was Consulting Engineer on some of the Lines, and Mr. Locke on others. In 1851 I was appointed a Surveyor on the Government Staff of Tasmania. On the introduction of "The Cross and Bye Roads Act" I was appointed Road Surveyor for the Districts of Chudleigh, Devon, Westbury, and Longford, and continued in charge of those Districts until they were handed over to local management. Since 1857 I have followed my profession in a private capacity, being recognised by the Government. I was also employed by the Launceston Corporation to make Surveys and take Levels for the Launceston Water Works. These are the most important parts of my professional experience.

3. Have you examined the plans and sections, field books, and quantity sheets of the Line surveyed by Mr. Doyne, and with what result? I have examined Mr. Doyne's field books for two sections of the Line,—8 miles of the worst portion terminating at Evandale Road, and twelve miles between Longford and Westbury. I found the levels had been correctly taken and checked; the errors recorded by check being only about 7 inches in the 20 miles. I have also selected several of the heaviest cuttings, and estimated quantities, and found them correct. I might also state (which is an important engineering point) that the cuttings and embankments correspond, there being only 112,725 cubic yards thrown to spoil out of 1,119,117 cubic yards of cutting on the whole Line.

4. When the works are carefully set out in detail, will it, in your opinion, be possible to reduce the amount of earthwork, and so leave a further sum for contingencies? Yes, I think so. I believe the quantities are taken full. What I tried, I know to be taken full. When more carefully set out, the work will be reduced.

5. Will you please refer to the blank items of estimate at the end of Mr. Doyne's Report. What would you consider fair prices for these items? No. 1 from 1d. to 2d., or an average of three half-pence. No. 2 (fencing) at the most 5s. a rod, or £2 a chain. No. 3 at 2s. 6d. a yard. No. 4 about 2s. 6d. a cubic yard. I speak of local prices. No. 5; about 5s. No. 6, 1s. No. 7, about three half-pence. The subsequent items require to be gone into by calculation: I will make these calculations, and furnish the result to the Committee. I cannot say as to the Permanent Way.

6. You have heard of a direct Line going at the back of Mr. Cleveland's house: without reference to the traffic by such a Line, and its insufficiency or otherwise to pay interest &c., what is your opinion of the comparative value of the two Lines to the Colony? I think the route as surveyed is preferable both commercially and professionally. There are about 16 miles to Longford which might eventually form part of a main trunk to the Midland District and to Hobart Town. From my knowledge of the country, any such Line must pass through the valley of the South Esk, or Lake River.

7. You will find at page 6 of Mr. Doyne's Report his estimate for 8 intermediate Stations, £5,600. Do you think this sufficient, the buildings being plain, and generally of wood? I do. I think it is ample for the style of the building which I consider necessary. I object altogether to an expensive style of building.

8. What is your opinion of the estimates for other Stations, Workshops, &c., in the same paragraph? I think it ample to build Stations suitable to the requirements of the Colony.

9. Do you know the country through which Mr. Doyne's Line runs? Thoroughly well.

10. What are its capabilities for the economical construction of a Railway? I think great. Timber abounds in the neighbourhood of Deloraine; there is plenty of ballasting on the Line nearly all the way; the land is capable of being easily cut for drains, and so on. It is impossible to imagine a country better adapted for a Railway between Perth and Deloraine. There are, perhaps, a few difficulties between Perth and Launceston, on account of the unevenness of the country. I use the word "difficulty" in regard to expense, rather than to engineering.

11. Presuming all persons on the Line to ask compensation for land, for severance, and other injuries, can you form an opinion of the probable cost per mile? I really do not think you could take the value over £10 an acre. I think an average of £10 an acre would cover all.

12. Do you approve of the localities selected for the Station at Launceston? I do. I think the selection is one of the best features in the whole scheme.

By Chairman.—13. In what does preparation of Railways for Parliament consist? In field work, surveying, levelling, preparing plans, sections, and quantities.

14. You have said you selected the heaviest cuttings—name them? No. 13 was one of the heaviest cuttings on the Line, and being taken out in a great number of sections, I calculated each separately. I took out the quantities from the section as submitted by Mr. Doyne.

15. What is the general nature of the ballasting available along the Line? I think it is more grave than anything else. One portion of the country is sandy, but there is plenty of gravel along the Line. There would be no difficulty in getting gravel in the vicinity of any point on the Line.

16. Is the timber on the Line fit for sleepers? It is; but the whole of the country is not timbered through which the Line passes. Sleepers can be economically obtained on the Line and the vicinity.

By Mr. Sharland.—17. All your answers to the questions put to you as to the cuttings are collected from Mr. Doyne's field notes and sections of the work furnished by him, and not by examination on the ground? No; by the field books and sections, not by actual survey.

18. With what object did you check Mr. Doyne's cuttings and calculations from his field notes? To see if his calculations were correct.

19. You have stated that Mr. Doyne's estimate of £12,000 at Launceston for Station, Sheds, and Workshops would be sufficient: does that estimate contemplate warehouse-room for the reception of grain? No, it did not provide for permanent storage; but even then the £12,000 could be expended in buildings which would provide ample storage, simply by making very plain buildings. It will provide for temporary storage.

20. Then if Mr. Doyne, having calculated that the Sheds, Workshops, and Station would cost £12,000, that you believe is too much for those purposes? I do not. I believe that £12,000 would be ample to provide the accommodation that will be necessary for the business of a Railway Station, and the temporary storage of grain.

21. In giving that answer, what quantity of grain do you expect might be so stored? The storage which I would expect to be made use of would not be a permanent storage like the stores in Launceston, but I mean this would be sufficient to provide storage for the grain at the Station till it could be conveniently removed.

22. Then your reply is based upon the assumption that no large amount of grain would remain at the Station? No large amount; but at the same time, supposing buildings to be constructed of timber, there would be ample accommodation for all the grain required to be stored at Launceston.

By Mr. Douglas.—23. Is it usual in Railway business to store goods or produce, excepting *in transitu*? I should say not.

24. Do you not consider the proposed Terminus at Deloraine is well selected, having in view the future extension of the Line into the County of Devon? The Line must pass close past the present Station if it is extended.

Mr. Clayton retired.

QUESTIONS from the SELECT COMMITTEE on the proposed DELORAINÉ RAILWAY to the Hon. WM. ARCHER, Esq., J.P.

1. Is it your opinion that the Railway between Launceston and Deloraine, as proposed by Mr. Doyne, would be generally advantageous to the Western Districts? Undoubtedly.

2. Can you state the respective facilities which the farmers in the Road Districts of the Upper Meander, Midhurst, and Chudleigh have for surveying their produce to the Terminus of the proposed Railway at Deloraine and the Ports of the Mersey? Produce is almost invariably conveyed, both to Deloraine and the Ports of the Mersey, in drays drawn by bullocks, over roads which in the summer are very rough, and in the winter are nearly impassable.

3. Have you made any calculations as to income to be made from the Railway; if so, will you inform the Committee? Yes; as set down in a letter to Mr. John Meredith, which is now, I

believe, in possession of the Committee. I find, however, that I have not allowed for the produce which would be carried by a Tramway to the Mersey Ports, and have omitted the item of "Repairs" in the Estimate of Expenditure. I think, also, that I have estimated two or three other items of receipts too highly. I wish, therefore, to make the following corrections:—

RECEIPTS.

	£	s.	d.	£	s.	d.
Amount of estimate	—	—	—	42,975	0	0
Deduct 4300 tons Grain and Flour, at 15s.....	3225	0	0			
200 tons Potatoes, at 15s.....	150	0	0			
500 tons Bark, at 5s.....	125	0	0			
500 tons Hay and Straw, at 15s.....	375	0	0			
40 tons Bran, at 15s.....	30	0	0			
1000 tons Goods outwards, at 20s.....	1000	0	0			
				4905	0	0
				£38,070	0	0

EXPENDITURE.

Amount of estimate	46,000	0	0			
Add repairs.....	3400	0	0			
				49,400	0	0
Deficiency	—	—	—	£11,330	0	0

4. Have you any statement to make in respect to Tramways in the Western Districts? I am decidedly of opinion that Tramways would be far superior to ordinary roads, both as regards the cost of construction and maintenance in good condition, in the Western Districts, and in all localities where the soil is rich, and timber is abundant or easily to be procured.

5. Are you of opinion that the substitution of a Tramway for Mr. Doyne's Railway would be sufficient to counterbalance the difficulties now existing in the conveyance of the produce to market? Amply sufficient for the next 25 years at least. I am inclined to believe that a serviceable tramroad, permitting a speed of 10 miles an hour, to be worked with horses, or possibly with small locomotive engines, or with both, might be constructed for less than £2000 a mile through the country, traversed by the line selected by Mr. Doyne; and that it would, as a matter of course, admit of charges for goods and passengers very considerably lower than those proposed by him, and would afford a sufficient surplus above interest and working expenses to form a large sinking fund, and to yield excellent dividends to the Shareholders. It might, I think, be so planned as to form, where required, the actual route of an enlarged Railway to be worked at higher speed.

6. Can you state the average prices at which wheat, oats, potatoes, barley, and hay can be grown and rendered fit for market in your district? I think that, exclusive of rent, wheat might be set down at about 1s. 9d. to 2s. a bushel, oats at 1s. 3d. to 1s. 6d., English barley at 2s. to 2s. 6d., hay at £2 to £2 10s. a ton, and potatoes at £2 to £2 10s. a ton. I do not speak, however, by any means positively on this subject.

7. From your late experience in the English Railways both in passenger and goods traffic, and taking your own data as a near approximation of the traffic on the Deloraine Railway, will you state, to the best of your judgment, how long that traffic would occupy the line, referring more particularly to the goods' traffic, and supposing the capacity of the train to be suitable to the probable requirements of the Line? The wording of the latter part of the question creates some difficulty as to the answer. I may state, however, that I think the whole of the goods and passengers inwards, as estimated by me, might, if carried continuously, be conveyed without difficulty to Launceston by one locomotive engine, running from Deloraine twice daily, in about 250 working days; if running three times daily, in about 166 working days; or, running four times daily, in about 125 working days. The whole might easily be conveyed from the country stations to Launceston, if ready for carriage, and carried continuously by four locomotive engines, in six weeks.

8. Do you think there is cause of complaint against the Promoters for including in the system of reguaranteee the Districts of Midhurst, Chudleigh, and Upper Meander, on account of their proximity to the nearer port of the Mersey? If so, do you not think the people of these Districts would realise great advantages by the use of the Railways to and from Launceston, and the interior of the Colony? I think, most assuredly, that the landholders and the farmers of the three Districts named have good reason to complain;—in the first place, because the Railway scheme must be regarded merely as a speculation, seeing that the present traffic would not produce a sufficient amount, within many thousands of pounds, to pay the interest on capital expended, and the working expenses,—the Promoters assuming that there will be increased traffic, notwithstanding the small population, sufficient to remedy the deficiency, and to provide a sinking fund, in addition, for paying off the debts on the works;—in the second place, because the advantages which they

would derive from the Railway would more affect their convenience than their pecuniary interests, and would be sufficiently paid for by the ordinary charges for traffic;—and, in the third place, above all, because their chief interests are intimately associated with the existence of a Tramway to the Ports of the Mersey.

9. Supposing the Railroad to Launceston, and the Tramroad to the Mersey, complete, would not great advantages result to passengers from the coast towards the interior, and also, by traffic of stores from Launceston to the coast, and of coal, timber, &c., from the coast to Launceston, and the intermediate Districts? No sane person can doubt for a moment that great advantages would flow from the existence of a Railway from Launceston to Deloraine, and a Tramway thence to the Mersey. Similar advantages—and for goods practically as great—would result if there were a serviceable Tramway throughout. It is not at all likely that stores would be sent from Launceston to the North Coast, or that coal, timber, &c., would be carried from the coast to Launceston by land, while the transport can be effected in both cases more cheaply by water. It will not be necessary to send coal to the intermediate Districts for a century or more; and timber would be sent from thence to the coast for exportation.

10. Under the same circumstances would not the residents immediately adjoining the Terminus at Deloraine derive great advantages from the competition which must arise at the junction of the train and railroad as between purchasers at the Mersey and purchasers in Launceston? Would not the result of the construction of the Railway be also a large increase in the general value of the land in those Districts? Some advantages would, probably, be derived by the residents immediately adjoining the Terminus in the case supposed. The true measure of increase in the value of the land in the neighbourhood of the Deloraine Terminus, and in similar localities, would be the addition made to the value of the produce by the saving of expenditure for carriage. For example: a saving of 4½d. a bushel in the carriage of wheat to the place of shipment, or of 3d. a bushel for oats, would increase the annual value of the land in cultivation from 8s. to 10s. an acre.

11. Have you ever stated that the value of your own land will be increased by the construction of the Railway; and if so, to what extent in your opinion would its value be increased? I have stated this.—A good road in the neighbourhood of any estate must to a certain extent increase its value. The agricultural land would be more valuable in proportion to the saving in the cost of carriage of grain; the pastoral land also, though very slightly as respects the carriage of wool; but the value of the grazing land—mine is chiefly grazing and pastoral land—would not be increased; for it would not be profitable, excepting when meat is higher in price than I ever expect to see it again, to send sheep and cattle by rail to Launceston, to say nothing of the impossibility of sending bush cattle. It is not likely that more sheep and cattle would be fattened were the Railway in operation than are fattened now. It must be remembered that a Tramway to the Mersey Ports would render me altogether independent of the Railway; and it would thus be the Mersey Tramway—not the Launceston Railway—which would, practically, increase the value of my land.

12. Would not the facilities of the Railway tend to induce the transmission to Launceston of farm products which are not now available in consequence of the absence of these facilities; and might not these products usefully take the place of more grain cultivation on small farms? Yes, in the immediate vicinity of the line. But the amount of such products would not, without a considerable increase in the number of the labouring population, be worth taking into account.

13. Ought not the great general advantages of Railway communication to be regarded by the settlers as outweighing any small deficiency in the Railway Revenue during its early working? That would, of course, depend on the amount of the deficiency, and the probability of its being soon made up by increased traffic returns. Rates for making good the deficiency would fall on the settlers, and especially on those living several miles beyond the Terminus, or away from the line, as an additional and objectional Road Rate.

14. Would not all the farmers within six or seven miles of the Terminus at Deloraine be greatly benefitted by the existence of Railroad facilities with Launceston and the interior Districts? The advantages which they would derive from the Railway would be rather advantages of convenience than such as would affect their pecuniary interests; and the ordinary charges for traffic would be sufficient payment for them.

15. Has any calculations been made of the cost of a Tramway to the Mersey, and has the examination of the country been made by instruments? I think that none but calculations of private individuals have been made of the cost of a Tramway to the Mersey Ports. I learn from the Chairman of the Tramway Committee at Torquay, that Mr. William Moore, a resident there, and a very competent person, offered to construct a serviceable wooden Tramway for £700 a mile, and to have it in operation in six months. The survey is being made with instruments for £400, by Mr. Allen of Latrobe. A survey was made with instruments several years since, and laid down in plan and section; but a different and much better line is now talked of.

16. Has any estimate been made of traffic returns to and from the Mersey to Deloraine,

irrespective of any Railway connection existing between Deloraine and Launceston? Yes; by private individuals only, I think, unless one is included in the papers concerning the Tramway in the possession of Mr. Adye Douglas. It is fully believed by the Promoters of the Tramway, that the returns would, with a greatly reduced charge for carriage, yield a sufficient amount to pay interest and working expenses, and to afford fair dividends to the Shareholders.

17 SEPTEMBER, 1862.

J. N. GALE, *Esq.*, *Civil Engineer*, called in and examined.

By the Chairman.—1. Have you formed an opinion as to the practicability of a Railway from Launceston to Deloraine? I have.

2. Have you had an opportunity of examining the Line of Railway from Launceston to Deloraine, as proposed by Mr. Doyne? I have; and I see that Mr. Doyne has done me the honor to adopt my Line from Perth to Launceston. It is, virtually, the same Line.

3. Are you acquainted with the remainder of that Line from Longford to Deloraine? I am generally acquainted with the country.

4. In what portion of the Line do the greatest obstacles exist? Between Perth and Launceston.

5. Could sufficient evidence of the nature of the deep cuttings be obtained from the surface formation without boring or trial shafts to enable the Engineer to form his calculations? Certainly not. I may say that I repeated that statement in a Report I made to the Promoters of the Railway. If the rock appeared on the surface that would be sufficient indication. It is impossible to say what you will meet with except by boring.

6. In a Parliamentary Survey is it usual to obtain information by boring or trial shafts? In the deep cuttings it is.

7. Does the geological formation and general appearance of the country give sufficient evidence of the nature of the cuttings at St. Leonard's and the Cocked Hat to enable an engineer to form his calculations? I think there is sufficient evidence to show that rock exists.

By Mr. Balfe.—8. You stated that Mr. Doyne had virtually selected your Line between Launceston and Perth? He has adopted my trial Line, of which I furnished a section.

9. Are you aware what sum has been paid to Mr. Doyne for the survey of the Launceston and Deloraine Railway? I have heard from report that Mr. Doyne received £2500, of which I believe the Government contributed £1500.

10. What does your experience enable you to estimate as the usual cost of surveying, &c., preparing and staking out for the Contractor, lines of Railway? I took a large share in laying out the Hunter River Line in New South Wales, 60 miles north of Sydney; and the sum agreed upon, and actually paid, was £20 a mile for surveying, making plans, and working Section. The Survey was undertaken by a pupil of Mr. Bidder's, in the first instance. Mr. Bidder was last year President of the Institution of Civil Engineers. There were no borings or trial shafts on this line. The Company had sufficient funds ready to go on with the works.

11. Do you think the sum of £2500 an exorbitant sum to pay for the survey of the Launceston and Deloraine Railway? I think it an enormous sum; but I am glad Mr. Doyne has got it, he deserves it. I may state that the promoters declined my offer of £500 for the same work as Mr. Doyne performed. I offered to examine the Country, select the most advantageous Line, and furnish a plan of 4 chains to an inch. I could have done it at £20 a mile, and cleared £400 by it.

12. Could approximate or reliable calculations, as to the expense of cuttings on the line between Launceston and Perth, be made unless the substrata had been ascertained by borings? An accurate estimate could not be made. In a Parliamentary Survey at Home you are obliged to take borings.

13. Should a Direct Line of Railway be ever opened between Hobart Town and Launceston, would not the Circuitous Line now projected between Launceston and Deloraine, if carried out, act detrimentally upon such an undertaking? No; I think it quite possible to come in anywhere between Longford and Perth.

14. Ought not every Line of Railway to be laid out as the basis or a part of some settled and defined system, which could be gradually developed or extended according to the growing wants of

the Community? The country generally is not adapted for Railways. The Districts presenting favorable features for the construction of Railways are not numerous, and are at the same time isolated and far apart.

15. Could not a much more direct, and a shorter line, with workable gradients, be obtained between the Termini of the present projected line? A shorter line could be made, but it would require auxiliary power to work an inclined plane.

16. Are there not many Railways constructed having gradients of 1 in 50, or 1 in 45? Yes, very frequently; many of the Victorian Lines have gradients of 1 in 50, but still it is not desirable to adopt these gradients if the country admits of others more favorable for working.

17. Does your knowledge of the principal details of Mr. Doyne's Report enable you to confirm their accuracy? I merely saw Mr. Doyne's Report in the newspapers.

18. Have you had long experience in Victoria? I have; I was engaged there and in New South Wales for 8 or 9 years.

19. From your experience in Victoria, and the other Australian Colonies, do you think that the markets for our timber and agricultural produce are likely to be closed against us, by the increase of cultivation, and the rapid extension of Railway communication in these Colonies? No, I should say not; Tasmania has the advantage of a good climate, and ought to advance in the same direction as Victoria and New South Wales.

20. Do you think a Railway from Hobart Town to Launceston would be of national advantage? I cannot see how it could pay; there is not sufficient population.

21. Do you think a Railway from Launceston to Deloraine would pay? It ought to pay through such a fertile country.

22. Are you of opinion that, taking into consideration the price of labour in Tasmania as compared with other countries, the probable working expenses, as set forth in the Report, will not exceed the calculation? I have not paid any attention to Mr. Doyne's figures.

23. Did you ever know an instance where an enquiry before a Railway Committee was completed without the evidence of the Engineer-in-Chief? It is impossible to get a Bill without the Chief Engineer's evidence. Some Engineer would have to take the responsibility.

24. Then if Mr. Doyne, the Engineer-in-Chief, does not present himself for examination before the Committee, and Mr. La Touche, his assistant, says that he is not responsible for the Report, do you think there is really any practical responsibility by an Engineer to the public, or Parliament, for this undertaking? Not if Mr. La Touche repudiates the responsibility which ought to devolve on Mr. Doyne. I consider Mr. La Touche's proper course would be to adopt and endorse Mr. Doyne's Report.

By Mr. Sharland.—25. Is it your opinion that sufficient particulars in detail of the proposed Line have not been furnished by Mr. Doyne? I should be very sorry to say that. I only glanced over Mr. Doyne's Report in the newspaper.

26. Supposing that Mr. Doyne has not furnished sufficient particulars in detail, and a contract were invited for the work, would not a contractor estimate at a higher rate to protect himself? I consider it impossible that any contractor could tender for the work without borings having been first made either by the Engineer or himself, or the cost of Bridges without the drawings. Still I have no doubt, from Mr. Doyne's experience in Bridges, that he is perfectly qualified to make approximate estimates.

27. An Engineer I believe is required to give the entire strata at any cuttings,—whether sand, clay, gravel, &c.,—is he not? He is, before a Parliamentary Committee.

28. From the appearance of the surface, can you always say what is underneath to the depth of 10 to 30 feet? Quite impossible in a rolling country. On a plain you might assume that it was soil.

29. The ground to which I refer is at St. Leonard's and the Cocked-hat Hill on Mr. Doyne's Line; and of that are you prepared to repeat the last answer? From what I know of the country, the rock can be got at no great depth.

30. Will you state how an Engineer should show, on his working Sections, the nature of the cuttings? Where the cutting is over 10 feet, an Engineer ought to be prepared to state, from actual examination, what is beneath the surface. On a cutting of that depth there would be a vertical shaft or bore shown, with the several strata marked on it.

31. Have you formed any opinion in respect of Tramways or Plank Roads? The chief cost would be in forming the Roadway before you put on the superstructure. This would depend on the country. You cannot generalise as to the expense, especially in this Colony.

By Mr. Dowling.—32. Did the work you speak of at the Hunter River include the primary examination of the country and the selection of the Line, or was it the survey usually required after such preliminary survey for the purpose of preparing for the contractor? It did include the examination of the country, and the selection of the best route.

33. What is the usual price per month paid to efficient Railway Surveyors, by Engineers-in-Chief, in the Colonies of Australia? It varies from £30 to £60 a month.

34. Then, if Mr. Doyne paid £60 a month for Surveyors in Tasmania, do you think he paid too much? It is impossible to say.

35. Do you state of your own knowledge that in all Parliamentary Surveys the Engineer-in-Chief produces the result of his examination by borings or shafts? He must be prepared to answer any questions as to strata. I may state, the usual way before a Parliamentary Committee in London is to produce the person who takes the borings.

36. Is there not a distinction to be observed between the preliminary Parliamentary Survey of an Engineer-in-Chief, and the detailed working Survey for the Contractor, made after a Bill has been obtained from the English Parliament? Certainly, a great distinction; but a Parliamentary Survey must include the borings.

By Mr. Grant.—37. Will you state your experience as a Civil Engineer, commencing with the period of your articles? I served my time with my brother, one of the chief Engineers in Glasgow. I have been engaged on Railways in Great Britain, Canada, New South Wales, and Victoria.

By Chairman.—38. Would Rails at 70 pounds to the yard be sufficient? Quite sufficient.

39. With a gauge of 5½ feet and a Rail of 70 pounds to the yard, what would be the distance of sleepers? The average distance would be about 3 feet from centre to centre.

Mr. Gale withdrew.

APPENDICES TO EVIDENCE.

A.

MINUTES of Proceedings at a Public Meeting of the Colonists of the Northern Districts of Tasmania, held on Thursday, 27th August, 1857, at the Court House, Launceston, for the purpose of deciding on the best mode of carrying out the proposed Railway from Launceston to Deloraine, in accordance with the Resolutions passed at the Public Meetings recently held at Deloraine, Westbury, Longford, Perth, and Evandale.

The Right Worshipful the Mayor of Launceston in the Chair.

1. Proposed by the Honorable W. S. Button, Esq., M.L.C., seconded by George Gibson, Esq.—“That this Meeting, impressed with the importance of the speedy and economical transit of produce intended for shipment to the neighboring Colonies, is desirous that a Railway should be constructed with all possible expedition through the Agricultural Districts of Morven, Longford, Westbury, and Deloraine.”

2. Proposed by Alexander Clerke, Esq., seconded by Dr. Casey—“That the Local Government should be at once moved to take steps for the construction of a Line of Railway, with Termini at Launceston and Deloraine, it having been shown by authentic Returns that there would be sufficient revenue to render the expenditure of £500,000 on such a Railway immediately remunerative.”

3. Proposed by John Crookes, Esq., seconded by H. B. Nickolls, Esq.—“That, in the opinion of this Meeting, the Local Government should undertake the construction of Railways in Tasmania, because they would pass over and near a considerable breadth of public land; the Parliamentary proceedings would cost less; capital might be borrowed on more advantageous terms; and, as the iron roads were paid for, the fares might be reduced, or the surplus income devoted to the extension of Lines.”

4. Proposed by A. F. Rooke, Esq., seconded by Mr. J. J. Moore—“That the following gentlemen be the Executive Committee to correspond with the Government, to prepare Petitions to Parliament, and generally to take measures for the promotion of the undertaking; namely,—The Mayor of Launceston, Henry Dowling, Esq., Alderman Cohen, Dr. Casey, W. Cleveland, James Robertson, J. Aikenhead, Alexander Clerke (Longford), Alexander Rose (Morven), R. H. Douglas (Westbury), J. B. Thomas (Morven), J. K. Archer (Carrick), Samuel Henry (Deloraine), and the Secretaries of Local Committees; that the Members of Parliament representing the Northern Districts of the Colony be Honorary Members; and that Committees elected in the several Districts of Deloraine, Westbury, Carrick, Longford, Perth, and Morven be requested to act as Corresponding District Committees.”

5. On the Motion of Mr. Cohen, seconded by Alexander Clerke, Esq., A. F. Rooke, Esq., M.H.A., was then called to the Chair, and a vote of thanks to the Mayor was carried by acclamation,

B.

LAUNCESTON AND WESTERN RAILWAY.

MINUTES of Public Meeting, Perth, 1857.

At a Meeting of the Residents and Landowners of Perth and the vicinity, held at the *Queen's Head Hotel*, on the 30th day of July, 1857, Alexander Clerke, Esq., in the Chair,—

It was proposed by Mr. J. H. Wedge—“That this Meeting fully concurs in the proposed Line of Railway from Deloraine, *via* Longford, Perth, and Morven, to Launceston, and now appoints the following gentlemen to unite with the Longford Committee for the purpose of promoting the same:—Messrs. Thomas Ritchie, William Gibson, James Pyke, and the Mover.” Seconded by Mr. John Ritchie, and carried.

It was proposed by Mr. David Ritchie—“That this Meeting is desirous not only of expressing its opinion of the desirability of the Railway, but wishes to suggest to the Committee now appointed, and also to the General Committees of the Districts, that a Subscription List be opened for the purpose of raising a sum of money for preliminary expenses; and that communications be opened with the agent of Messrs. Jackson and Co., who is now in Melbourne, for a Survey and Estimate of the Line, and also invite him to contract for the same.” Seconded by Mr. Bird, and carried.

Mr. William Gibson having been voted to the Chair, a vote of thanks was tendered to Mr. Clerke for his able conduct.

ALEXANDER CLERKE, *Chairman.*

MINUTES of Public Meeting, Evandale, 1857.

A MEETING of the Inhabitants of the District of Morven took place at the *Patriot King Inn*, Evandale, on the 29th July instant, to take into consideration the proposed Railway from Launceston, *via* Evandale, to Deloraine. The Meeting was respectably and numerously attended.

J. H. Wedge, Esq., having, on the motion of A. Rose, Esq., seconded by J. B. Thomas, Esq., taken the Chair, it was proposed by J. B. Thomas, Esq., seconded by John Ralston, Esq., and carried unanimously—“That this Meeting is favorable to the construction of a Railroad through this District, in connection with the proposed Line from Launceston to Deloraine.”

Proposed by Alexander Rose, Esq., seconded by Matthew Ralston, Esq., and carried unanimously—“That a Committee be appointed to coöperate with the Committees of the other Districts, to take the necessary steps for convening a General Meeting of the Colonists at Launceston at an early date, to consider the best means for carry-

ing into effect this desirable object; such Committee to consist of the following gentlemen, with power to add to their number:—Messrs. J. B. Thomas, Joseph Kirkby, Donald Cameron, John Ralston, Donald Beaton, Alexander Rose, Robert Hunter, and John S. Martin.”

Proposed by Alexander Rose, Esq., seconded by Mr. John S. Martin, and carried unanimously—“That the thanks of this Meeting be given to Mr. Wedge for his impartial conduct in the Chair, and for the valuable information afforded by him to the Meeting.”

MINUTES of Public Meeting, Westbury, 1857.

A MEETING was held at the *Westbury Inn*, Westbury, on Wednesday, the 22nd day of July instant, when the following Resolutions were unanimously carried:—

1. Proposed by Mr. Douglas, and seconded by Mr. Austen—“That Dr. M’Creery do take the Chair.”

2. Proposed by Mr. Austen, and seconded by Mr. Wright—“That this Meeting, fully concurring with the Public Meeting held at Deloraine, is of opinion that a Railway from Launceston to Deloraine, *vid* Carrick and Westbury, is absolutely required, and would be a profitable undertaking.”

3. Proposed by Mr. O’Meara, and seconded by Mr. Simmons—“That the following gentlemen be appointed as a Local Committee, to communicate with the other Local Committees, to take such measures as may be required for forwarding the proposed Railway, and for collecting subscriptions for defraying a share of the expense of the Survey of the said Line:—Messrs. T. W. Field, C. H. Wright, R. H. Douglas, J. P. Jones, S. Montgomery, M. Simmons, R. Lyall, Reverend T. Reiby, A. Clerke, W. M. Dean, Dr. M’Creery, E. Martin, M. O’Keefe, J. Best, E. Meredith, R. Butcher, J. East, I. Noakes, Dr. Richardson, T. White, J. Fawns, H. Joyce, G. Scott, J. Hogg, William G. G. Sams, D. O’Meara, and K. Swanston.”

4. Proposed by Mr. Wright, and seconded by Mr. Simmons—“That the thanks of this Meeting be given to Dr. M’Creery for his able conduct in the Chair.”

THOMAS F. AUSTEN, *Secretary.*

25 July, 1857.

MINUTES of Public Meeting, Longford, 1857.

At a Meeting of the Inhabitants of the District of Longford, held, pursuant to advertisement, at the *Blenheim Hotel*, this 23rd day of July, 1857, John H. Wedge, Esq., in the Chair,—

It was proposed by Mr. H. B. Nickolls—“That this Meeting cordially approves of the scheme for the establishment of a Railway from Deloraine, *vid* Longford and Morven, to Launceston, and requests the following gentlemen to act as a Committee to enquire and ascertain the most available route, the best method of raising the necessary funds, to obtain all information necessary to promote the undertaking, and to correspond with the other Committees for the purpose of arranging a General Meeting to be held in Launceston: such Committee to consist of—Messrs. H. Clayton, William Archer, John Wilmore, Alexander Clerke, J. C. Houghton, David Ritchie, Abraham Walker, Charles Arthur, George Gibson, Wm. Dodery, James Keane, W. R. Paton, and the Mover, with power to add to their number.” Seconded by Alexander Clerke, Esq., and carried.

Proposed by H. Clayton, Esq.—“That a Committee, consisting of the following gentlemen, be appointed for the purpose of considering from time to time the public requirements of the District, more especially as regards Reserves for Public Buildings, Markets, and places of Public Recreation:—Messrs. William Archer, David Ritchie, Isaac Noake, William Dodery, H. B. Nickolls, Abraham Walker, W. H. Clayton, Alexander Clerke, John Wilmore, W. R. Paton, George Gibson, and the Mover.” Seconded by Mr. David Ritchie, and carried.

Mr. Wedge having vacated the Chair, Mr. H. Clayton was requested to occupy it. A vote of thanks was then passed to the Chairman for his impartial conduct while in the Chair.

JOHN H. WEDGE, *Chairman.*

MINUTES of Public Meeting, Deloraine, 1857.

THE Public Meeting on the Deloraine Railway and Mersey Tramroad took place on Friday, 26th July, at the *Deloraine Inn*, the Hon. W. Nairn, M.L.C. for the District of Meander, in the Chair.

Mr. Hutchinson proposed, and Mr. Johnstone seconded, the First Resolution, which was passed after a few remarks from the mover in support of the Resolution:—“That, from the continual increase of Agricultural Produce in this District, it is very desirable that some means should be devised for sending our produce to market in less time, and at less expense to the producer; and that, in the opinion of this Meeting, the best way to accomplish this object would be by a line of Railway from Deloraine to Launceston.”

The Second Resolution was proposed by A. F. Rooke, Esq., M.H.A.:—“2. That, from the statistics of the traffic passing through the Districts of Deloraine, Westbury, Carrick, Longford, Perth, and Evandale, it is the opinion of this Meeting that the line of road surveyed by Mr. Sprent, and reported to the Governor, June, 1856, would, if carried out, yield a liberal rate of interest on the cost of the Railway, and be of essential service to those Districts.” A. Douglas, Esq., seconded the Resolution.

Mr. R. H. Douglas proposed Resolution 3, and gave to the Meeting several pieces of information respecting the low prices a Railway could carry goods to what a carrier can. “3. That Public Meetings be invited in Launceston, Westbury, Carrick, Longford, Perth, and Evandale, to appoint Committees to ascertain at an early date what compensation would be required by landholders on the proposed line of road for the land through which it will pass, and to take such measures as they may deem desirable to promote the construction of the Railway.” Seconded by Mr. Henry.

Proposed by A. J. Horne, Esq., seconded by Mr. J. M. Roberts—“4. That the Deloraine Committee consist of—A. F. Rooke, Esq., A. J. Horne, Esq., J. K. Archer, Esq., D. Rock, Esq., John Field, Esq., P. Keane, Esq., Messrs. Blair, Thomas, Henry, Blake, Hutchinson, Bonney, and Grice.”

Proposed by A. Douglas, Esq., seconded by Mr. Henry—“5. That the Deloraine Committee be empowered to communicate with the Mayor of Launceston, and other parties in the several Districts named in Resolution 3, with a view of the Committees therein referred to being appointed at the earliest period.”

C.

LIST of SUBSCRIBERS towards the Fund for the Survey of the LAUNCESTON and WESTERN RAILWAY by Mr. Doyne:—

	£		£
1 Sir Richard Dry.....	50	38 W. Bentinck.....	10
2 H. Dowling.....	20	39 John Scott.....	10
3 I. Sherwin.....	20	40 Smith & Poole.....	10
4 W. S. Button.....	20	41 Ed. Brooks.....	10
4A J. Crookes.....	20	42 Hatton & Laws.....	10
5 J. Robertson.....	20	43 H. Button.....	10
6 A. Douglas.....	20	44 B. W. Champion.....	10
7 W. Archer, junior.....	20	45 M. Gaunt.....	10
8 John K. Archer.....	20	46 W. L. Goodwin.....	10
9 C. J. Weedon.....	20	47 W. Dodery.....	20
10 W. D. Grubb.....	20	48 John Sheridan.....	10
11 G. Gilmore.....	20	49 T. K. Archer.....	10
12 J. W. Gleadow.....	20	50 S. Jocelyn.....	10
13 W. Ritchie.....	20	51 R. Butler.....	10
14 James Peters.....	20	52 E. J. Dawes.....	10
15 White & Son.....	20	53 R. C. Gunn.....	10
16 James Scott.....	20	54 J. Cohen.....	10
17 R. De Little.....	20	55 W. Hart.....	10
18 George Ritchie.....	20	56 W. Henty.....	10
19 J. Aikenhead.....	10	57 Joseph Archer.....	20
20 J. F. Hobkirk.....	10	58 Mrs. Horne.....	10
21 J. Rockliff.....	10	59 R. Q. Kermode.....	10
22 J. Francis.....	10	60 W. E. Nairn.....	10
23 John Atkinson.....	10	61 C. Arthur.....	10
24 A. T. Woods.....	10	62 W. Archer.....	10
25 Walch & Sons.....	10	63 W. P. Weston.....	20
26 A. Clerke.....	10	64 J. Cox.....	20
27 T. T. Parker.....	10	65 W. Gibson.....	20
28 J. L. Smith.....	10	66 H. Clayton.....	10
29 William Peter.....	10	67 J. D. Toosey.....	10
30 A. Webster.....	10	68 Thomas W. Field.....	20
31 Bell & Westbrook.....	10	Union Bank.....	10
32 Ditcham & Co.....	10	Bank of Australasia.....	10
33 C. J. Irvine.....	10	Van Diemen's Land Bank.....	10
34 C. Smith.....	10	Commercial Bank.....	10
35 John Barrett.....	10		
36 R. Parker.....	10		
37 R. Thornell.....	10		
			<u>£1010</u>

D.

PETO, BRASSEY, & Co.'s, Sydney, 16th February, 1861.

DEAR SIR,

I wrote you on the 5th instant, and have since received yours of 7th idem.

I have now the pleasure of introducing to you the bearer of this letter, Mr. W. T. Doyne, the gentleman referred to in my communication of 25th ultimo, as qualified to advise you on the subject of your proposed Railway, and to undertake the necessary Surveys and preliminaries, if it is deemed advisable to proceed therewith.

To the testimony I have already borne to his fitness for this service, it is, I trust, unnecessary to make any addition. I will, however, mention that an inspection of testimonials which he has submitted to me has strengthened the opinion I had formed, that you were singularly fortunate in securing the services of a gentleman so well qualified as Mr. Doyne, by his antecedents and experience, to carry out your views.

Commending him to your good offices,

I am,
Dear Sir,

Yours faithfully,

W. C. SPILLER.

HENRY DOWLING, Esq., Launceston.

EXTRACT from a printed Paper of the Legislative Council of Ceylon, containing a Copy of a Despatch from Mr. Labouchere.

(No. 157.)

Downing-street, 10th November, 1857.

SIR,

I HAVE received your Despatch, No. 173, dated the 29th September, stating the difficulties which you apprehend in the event of any delay in the appointment of a Government Engineer for the purposes of the Railway Agreements. The instructions from the Ceylon Railway Company to their Chief Resident Engineer, Mr. Doyne, who proceeds to Ceylon by present Mail, have reached this Department for transmission to you, nearly at the same time with your Despatch.

2. I think you will agree with me that this document (which you will receive by the present Mail,) completely obviates the more immediate difficulties which you had in view; and I have to express my concurrence in the mode which it adopts of regarding the intentions of the Agreements.

3. Unlimited power of control and interference in all matters relating to the laying out and construction of the Railway is undoubtedly vested in the Local Government by the Agreements; but it by no means follows that this power should be exercised. On the contrary, it is essential to the efficient and speedy execution of the works, that the Government should abstain from interposing, so long as appointments of Engineers and other Officers are made, and proceedings conducted, so as to merit its confidence.

4. Mr. Doyne, the Company's Chief Engineer, who goes out by the present Mail, is a gentleman of great talent and experience, highly esteemed in his profession; and I understand that it is the opinion of some of the most eminent authorities on such a subject, that it was hardly possible for the Company to make a better selection. To send out a Government Engineer from England for the sole and express and standing purpose of controlling Mr. Doyne, at the very commencement of this gentleman's labors, would, it is to be feared, precipitate the conflict of authority which it is desirable to avoid, besides involving a very heavy expense to the Colony. Mr. Doyne will receive from the Company a salary of One thousand Five hundred Pounds a year, and a Travelling Allowance of Two hundred and Fifty Pounds a year besides. The Ceylon Government, I feel assured, could not procure the services of an Engineer, equal to Mr. Doyne, at a less rate. To appoint an inferior person would obviously be useless.

F.

*Institution of Civil Engineers, 25 Great George-street,
Westminster, S.W., 7th November, 1857.*

MY DEAR SIR,

ALLOW me to introduce to you my friend Mr. Doyne, who is going out to construct the Ceylon Railway, which is entirely under his charge. During his short stay in Alexandria he would be glad to see many of the peculiar arrangements on the Railway, which your great experience has dictated as necessary in a hot climate. Mr. Doyne is a special favorite with Mr. Stephenson, who will, I am sure, be pleased with any attention you may be able to show him. And his name must be known to you from his having had the command of the Army Works Corps in the Crimea during the War. He is a right good fellow, in every sense of the word; and we are all very sorry to lose him, even for a time, from among us. Individually, I would thank you, in anticipation, for the kindness which, I am persuaded, he will receive at your hands, and beg you to believe me,

Yours sincerely,

CHARLES MANBY.

HENRY ROUSE, *Esq., Alexandria.*

I CERTIFY that the foregoing is a true copy of the original letter, in Mr. Manby's autograph.

ARTHUR HANSBROW.

MY DEAR DOYNE,

I ENCLOSE you a letter from the Governor. It is, apparently, a private one; but you are at liberty to make any justifiable use of it. I hope you are not the worse for the journey to Galle; and I trust, most sincerely, that the trip home will quite restore your health. I would have sent you the enclosed sooner had the Governor been able to attend to business before; but he has been too unwell to do anything of late, and only commenced work again yesterday. Wishing you "*bon voyage*,"

Believe me,

Yours very sincerely,

SWINBURNE WARD,

W. T. DOYNE, *Esq.*

Pavilion, Kandy, 30th September, 1859.

MY DEAR SIR,

I CANNOT allow you to leave Ceylon without telling you how entirely I am satisfied that, whatever difficulties for yourself and for me, may have grown out of your Railway Report, you have discharged your duties, both to the Company and the Colony, with perfect integrity, and have brought to bear upon the task assigned to you an amount of ability and persevering exertion that I have never seen exceeded. Of course, it is very annoying to people who

have been taught to believe that they might get a Railway between Colombo and Kandy for £856,000, to find that it will cost two millions, or at the very least £1,800,000. But knowing, as I now do, the data upon which your estimate and that of Captain Moorsom were framed, I cannot doubt on which side the truth lies, and feel that you have done your duty as a man of integrity in stating it. For you were, in fact, after Mr. Labouchere's Despatch, as much my Professional Adviser as that of the Company; and I had a right to look to you for an honest opinion, without reference to its effect upon the London Sharemarket. That you have been too cautious, I think and hope; but I ascribe this to the difficulties of your position, which nobody knows better than I do. I rejoice to think that your professional reputation is safe in the hands of Mr. Stephenson, to whom I beg to be very kindly remembered. I wish him also to know that you have my entire confidence and regard, after two years of constant intercourse. With every wish for the restoration of your health,

Believe me,
Very faithfully yours,

H. G. WARD.

I CERTIFY that the foregoing are true copies of the original letters, in the autograph of Sir Henry Ward and his Private Secretary, Mr. Swinburne Ward.

ARTHUR HANSBROW.

B.C., 20th January, 1860.

SIR,

I HAVE received yours of the 13th instant, and I can only say, in reply, that I am as ready as ever to bear my testimony to your good service with the Army Works Corps. I only wish that I had any power to procure you some recognition of it.

I am,

Yours truly,

PANMURE.

W. T. DOYNE, Esq.

I CERTIFY that the above is a true copy of the original letter of Lord Panmure.

ARTHUR HANSBROW.

I CERTIFY to the Signatures of Mr. A Hansbrow, who made the above copies for Promoters.

H. DOWLING, M.H.A.

EXTRACT from Minutes of Evidence on Ceylon Railway, before Legislative Council Committee, Ceylon.

W. T. DOYNE, Esq., Chief Resident Engineer of the Ceylon Railway Company, called in and examined.

1. *Chairman.*—We wish to put to you questions of general importance, rather than on matters of detail. What were the chief works in which you were employed before your appointment as Engineer of the Ceylon Railway Company?—In 1839 I entered upon the practical study of Engineering, by being bound apprentice to Mr. Edward Dixon, the Resident Engineer of the London and South-Western Railway, Mr. Locke being Chief Engineer. In that capacity, I was engaged on the works of the Gosport Branch Railway till 1842, when I was given charge of the construction of the Permanent Way for the Hamburg and Besgedorf Railway, under Mr. Lindley. After its completion, I joined Sir John Macneill's Staff on the Irish Railways, upon which I was engaged in various operations till 1845, when I was appointed to prepare the Plans for the West Flanders Railways, of which Mr. George Stephenson was the Consulting Engineer. After the completion of these, I joined the Staff of the London and North-Western Railway, early in 1846, under Mr. Robert Stephenson, and my old master, Mr. Dixon: under them I was engaged upon various works till the middle of 1847, when I was appointed to take active charge of the construction of the Rugby and Leamington Railway, which I completed in 1851. I then entered into general practice as a Civil Engineer, and was engaged in a variety of works, chiefly in the Mining Districts of Wales, till 1855, when I was appointed to organise the Army Works Corps. I took command of it early that year, and served with the Army in the Crimea till its return to England in 1856. In the following year I was appointed to the Ceylon Railway. I have been a Member of the Institution of Civil Engineers for about ten or twelve years.

EXTRACTED from the official papers, Ceylon Legislative Council,

HENRY DOWLING, M.H.A.

Launceston, 8th July, 1862.

G.

28th February, 1862.

IN January, 1860, I agreed with the Directors of the Dun Mountain Copper Mining Company, in London, to go to New Zealand, and lay out a Line of Railway for them. I left England on the 26th of April, arrived in Nelson July 18th, completed my Designs and Report on the 6th of December, 1860. Mr. FitzGibbon, who came out as my Assistant, remained at Nelson to carry out my designs, and he opened the Line for traffic on February 3, 1862. It is a Horse-power Railway, of 13 miles in length, descending, from the mines, 2,800 feet in 10 miles.

W. T. DOYNE,

H.

LAUNCESTON AND WESTERN }
RAILWAY. }

I, THOMAS Dunn Webb, of Launceston, in Tasmania, Accountant, do hereby solemnly and sincerely declare, that I duly served a true Copy of the printed Notice hereunto annexed on the several persons mentioned and set forth in certain book called "The Book of Reference," either by delivering such Notice personally, or by addressing the several persons mentioned in the said Book of Reference through the Post Office, directed to their several places of residence. And I make this Declaration under and by virtue of the provisions of an Act of Council of this Island, intituled "An Act for the Abolition of Extra Judicial and unnecessary Oaths."

T. D. WEBB,

TAKEN and made at Launceston aforesaid, this twenty-eighth day of July,
one thousand eight hundred and sixty-two, before me,

JOHN SCOTT, *Justice of the Peace for the Town of Launceston.*

This is the Notice referred to in the annexed Declaration of THOMAS DUNN WEBB, taken and made this twenty-eighth day of July, one thousand eight hundred and sixty-two, before me,—JOHN SCOTT, J.P. for Town of Launceston.

Launceston and Western Railway, 5th May, 1862.

SIR,

WE hereby give you notice, that it is the intention of the Promoters of this Railway to apply to Parliament, at its next Session, for powers to construct the Railway; and as these powers will comprise authority over land belonging to or occupied by you, situate in the Parish of _____ and which is more particularly described and delineated in the Plans and Sections of the said Railway, in the Office of the Engineer-in-Chief, situate in Brisbane-street, Launceston, you are hereby informed that such Plans and Sections can be examined by you on any day during the present month of May (Sundays excepted), from 12 to 3 o'clock.

We are,

Sir,

Your obedient Servants,

DOUGLAS & COLLINS, *Solicitors,*

TRAFFIC RETURNS—1859-60.

WESTBURY ROAD.

	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	TOTALS.
Grain, bushels	54,323	50,639	43,041	28,816	25,878	20,220	16,804	16,072	23,378	78,070	76,150	71,450	504,841
Flour, tons	124	122	99	77	79	27	3	47	100	114	120	141	1,053
Potatoes, ditto	28	61	49	14	65	20	13	77	93	32	38	45	535
Wood, ditto	610	733	634	506	634	797	676	718	720	507	446	439	7,420
Hay, &c., ditto	53	102	190	171	125	159	176	291	272	86	75	74	1,768
Wool, bales	6	—	—	2	12	281	589	351	212	18	—	2	1,473
Bark, tons	4	—	23	82	142	220	153	50	61	3	—	—	738
Bran, bushels	178	331	410	473	333	626	462	1600	2790	1600	2500	2600	13,903
Cattle and Horses	379	279	380	313	287	281	244	348	283	208	178	197	3,377
Sheep	1761	967	644	729	598	787	996	962	790	26	1902	1144	11,306
Pigs	207	124	103	468	358	178	232	76	102	188	284	292	2,612
Goods, loads	184	289	468	296	338	358	325	376	318	693	468	484	4,597
Passengers in vehicles or on horseback	2716	3150	3055	3022	3540	3785	3880	4476	3973	5641	5485	5188	47,911

MAIN ROAD.

Grain, bushels	11,080	17,463	11,872	3502	5123	3922	3662	3590	19,570	26,200	16,350	19,860	142,194
Flour, tons	304	191	322	353	309	252	261	167	83	130	174	278	2,324
Potatoes, ditto	5	3	29	19	27	7	2	10	10	17	6	7	142
Wood, ditto	336	334	385	338	325	338	330	226	169	158	101	129	3,169
Hay, &c., ditto	256	171	185	222	125	51	84	303	190	155	89	104	1,935
Wool, bales	25	4	10	3	32	917	1672	878	184	34	8	—	3,762
Bark, tons	—	—	—	7	181	257	130	124	58	193	81	18	1,049
Bran, bushels	2210	1800	2500	2450	1256	15	1000	1440	4500	1160	2700	3225	24,256
Cattle and Horses	210	109	105	75	46	104	44	50	100	80	70	45	1,038
Sheep	809	688	988	411	428	684	590	2123	1351	1357	1600	880	11,909
Pigs	29	37	15	62	49	9	32	11	23	6	—	98	371
Goods, loads	300	368	343	386	329	367	353	247	246	252	105	119	3,954
Passengers by vehicles or on horseback	5911	6306	5793	5664	5565	5357	5803	4942	4025	4064	3627	3789	60,846

RECAPITULATION.

	WESTBURY ROAD.	MAIN ROAD.	TOTALS.
Grain, bushels	504,841	142,194	647,035
Flour, tons	1053	2824	3877
Potatoes, ditto	535	142	677
Wood, ditto	7420	3169	10,589
Hay, &c., ditto	1768	1935	3703
Wool, bales	1473	3762	5235
Bark, tons	738	1049	1787
Bran, bushels	13,903	24,256	38,159
Cattle and Horses for sale ...	3377	1038	4415
Sheep	11,306	11,909	23,215
Pigs	2612	371	2983
Goods, loads	4597	3954	8551
Passengers, not including foot passengers	47,911	60,846	108,757

TASMANIA, }
(TO WIT.) }

I, JOHN Green, do solemnly and sincerely declare that I was tenant of the Prospect Toll-bar or Gate, on the Westbury Road, near Launceston, from the 1st day of June, 1859, to the 30th day of May, 1860; that the Returns compiled by me, and handed to the Committee of Promoters of the Launceston and Western Railway, of the Passenger and Goods Traffic through the said Bar or Gate in 1859 and 1860, were made from actual observation, and that the same Returns are true and faithful.

TAKEN and declared this 24th day of July, 1862, before me,

JOHN FAWNS, *Mayor of the Town of Launceston.*

JOHN GREEN.

TASMANIA, }
(TO WIT.) }

I, JAMES Muirhead, do solemnly and sincerely declare that I was tenant of the Toll-bar or Gate on the Main Road, near Launceston, from the 1st day of June, 1859, to the 30th day of May, 1860; that the Returns compiled by me, and handed to the Committee of Promoters of the Launceston and Western Railway, of the Passenger and Goods Traffic through the said Bar or Gate in 1859 and 1860, were made from actual observation, and that the same Returns are true and faithful.

TAKEN and declared this 24th day of July, 1862, before me,

JOHN FAWNS, *Mayor of the Town of Launceston.*

JAMES MUIRHEAD.

K.

RETURN of Grain and Flour, &c., exported from Launceston, including Coastwise and Hobart Town, for the 12 Months ending 1st July 1860 and 1st July 1862, respectively.

	Flour.		Wheat.		Oats.		Barley.		Bran.		Bark.		Wool.		Potatoes.		Hay.		Butter and Cheese.		Fruit.	
	tons.	value.	bush.	£	bush.	£	bush.	£	bush.	£	tons.	£	lbs.	£	tons.	£	tons.	£	tons.	£	bush.	£
1860.	3,023	71,703	164,193	78,126	401,668	84,011	2,450	551	67,151	5,564	1,250	6,865	1,920,202	153,627	537	2,849	130	797	60	7,089	30,862	16,347
1862.	2,517	25,202	198,884	44,677	439,158	68,019	228	30	44,955	2,187	365	1,103	2,442,495	173,446	365	1,851	223	1,251	166	13,356	57,668	16,170

R. H. WILLIS, Collector of Customs.

RECAPITULATION of Exports of the Year ending 1st July 1860—1862, in Tons.

	1860.	1862.
	TONS.	TONS.
Flour.....	3,023	2,517
Wheat.....	4,925	5,966
Oats.....	8,013	8,783
Barley.....	55	5
Bran.....	671	450
Bark.....	1,250	365
Wool.....	960	1,221
Potatoes.....	537	365
Hay.....	130	223
Butter and Cheese.....	60	166
Fruit, (50 lbs. to bushel).....	771	1,441
TOTAL.....	20,395	21,502

Increase in Tons exported, 1107.

L.

RETURNS of the several Amounts received for Rent at the Turnpike Gates on the Western and Main Roads for 1859—1862.

	1859.	1862.	INCREASE.
Main Road.....	£ 580	£ 710	£ 130
Prospect.....	630	720	90
Entally.....	396	460	64
Sillwood.....	325	380	55
Exton.....	240	250	10

M.

POPULATION affected by the Railway.

Directly—Deloraine, by Census.....	3,114
Westbury, ditto	4,585
Longford, ditto	3,385
Morven, ditto	2,638
Launceston, ditto	10,359
Ringwood, ditto.....	1,974
	<hr/>
	26,055
Indirectly—Patterson's Plains (say)	1,000
On the Tamar, &c.....	500
In the Devon District, beyond Deloraine	500
Main Road beyond Perth, towards Campbell Town	2,000
	<hr/>
TOTAL.....	30,055
	<hr/>

Say 30,000, or one-third of total population, by Census—89,977.

N,

RELATIVE Proportions of Population, Acres in Cultivation, Bushels of Grain, Number of Live Stock, and Tons of Hay in the proposed Railway District and the Colony—1861.

Total population by Census 1857	81,492
Population of Railway District, including Selby, 1857 ..	23,806
	<hr/>
Total population by Census 1861	89,977
Population of Railway District, including Selby, 1861 ..	28,836
	<hr/>
Increase of total population, 4 years	8,485
Ditto district ditto, ditto.....	5,030
	<hr/>
Total acres under cultivation in Colony 1861	160,538
Ditto in Districts ditto	69,335
	<hr/>
Total number of Acres new land broken up during the year.....	7,894
Ditto in the Railway District	4,045
	<hr/>
Total bushels of wheat, barley, and oats in Colony 1861 .	2,301,769
Ditto in Railway District ditto.....	1,378,603
	<hr/>
Total cattle, horses, sheep, and pigs in Colony 1861	1,863,417
Ditto in Railway District ditto.....	345,577
	<hr/>
Total tons of hay produced in Colony 1861.....	59,851
Ditto in Railway District ditto.....	28,009
	<hr/>
Total bushels apples and pears in Colony 1861	135,739
Ditto in Railway District ditto.....	59,076

O.

COMPARATIVE Statement of Acres in Cultivation for 1859 and 1861 in the Railway District and the Colony at large.

1859.	ACRES.	1861.	ACRES.
In the Colony	208,619	In the Colony	248,064
In the District.....	197,845	In the District	125,478
			<hr/>
		Increase in the Colony	39,445
		Ditto District	17,633

X

P.

STATEMENT of Live Stock, Acres in Cultivation, Produce of the Colony, and proposed Railway Districts, respectively.

LIVE STOCK.	HORSES.	HORNED CATTLE.	SHEEP.	PIGS.
Launceston	1637	5276	42,562	2104
Longford	2570	6600	108,259	3210
Morven	1618	4570	78,375	1970
Westbury	3729	21,345	54,162	7590
	9554	37,791	283,358	14,874
Totals of Colony	22,128	87,114	1,714,498	39,677

ACRES CULTIVATED.	WHEAT.	BARLEY.	OATS.	HAY.
Launceston	6597	684	2809	1057
Longford	12,026	585	4611	5699
Morven	5672	532	3270	4110
Westbury	15,502	572	9880	2955
	39,797	2373	20,570	13,821
Totals of Colony	72,733	7279	29,022	31,803

QUANTITIES IN BUSHELS AND TONS.	WHEAT.	BARLEY.	OATS.	HAY.
Launceston	105,522	10,944	67,416	1585
Longford	240,520	17,550	138,330	14,274
Morven	79,320	10,480	65,720	6350
Westbury	357,508	14,691	270,602	5800
	782,870	53,665	542,068	28,009
Totals of Colony	1,380,913	169,381	751,475	59,851

Q.

PRESENT Rates of Cartage between Deloraine and Launceston.

	Deloraine.	Westbury.
Wheat, per bushel	9d.	6d.
Oats, ditto	6d.	4d.
By the ton, heavy goods and produce	30s.	20s.
Hay would be charged more, also Wool.		

Westbury, 21st July, 1862.

RODDAM H. DOUGLAS.

PRESENT Rates of Cartage between Longford and Launceston.

Wheat, per bushel, from 3d. to 3½d. according to quantity.
Oats, ditto, 2d. to 2½d.
Barley, ditto, 2½d.
Flour, per ton, 10s.
Bran, ditto, 10s.
Hay, ditto, 20s.
Potatoes, ditto, 10s.
Bark, per ton, green, 25s.
Ditto, dry, chopped, in bags, at 25s. per ton.

On return—Light goods, furniture, &c., (say) 25s. per ton.
Heavy goods at 15s. ditto.

21 July, 1862.

H. B. NICKOLLS.

STATEMENT of Revenue from Traffic, at 6½d. per Ton per Mile, for average of haulage of 26½ Miles.

Say—16,775 tons 16 miles, 18,899 tons 40 miles, (less wood not included)—35,674 tons 26½ miles, at 6½d. per mile.....	£	s.	d.
Wood (not included) 10,590 tons (say) half carried 10 miles only—5295 tons at 6½d.	25,845	0	0
Cattle and Horses (4500), including sheep and pigs, and all other live stock	1430	0	0
108,757 Passengers carried (say) 24 miles, at 2d.	850	0	0
	21,751	0	0
TOTAL	£49,876	0	0

The Local or District Traffic to be added to this.

24 July, 1862.

COMPARATIVE Statement, showing present Cartage per Bushel of Grain from Deloraine and Longford to Launceston, what those Prices are per Ton per Mile, and at what Rate they could be carried by Rail at average of said prices.

DELORAINE.	BY CARTERS—32 Miles.			BY RAIL—44 Miles.		
	1 bushel. 32 miles.	1 ton. 32 miles.	1 ton. 1 mile.	1 ton. 1 mile.	1 ton. 44 miles.	1 bushel. 44 miles.
Wheat	d. 9	s. d. 27 9	d. 10½	d. 6½	s. d. 23 10	d. 8
Oats	6	28 0	10½	6½	23 10	5½

The charge per ton for other produce is at least 30s. through to Launceston.

LONGFORD.	BY CARTERS—14 Miles Average			BY RAIL—16 Miles.		
	1 bushel 14 miles.	1 ton. 14 miles.	1 ton. 1 mile.	1 ton. 1 mile.	1 ton. 16 miles.	1 bushel. 16 miles.
Wheat	d. 3¼	s. d. 10 0	d. 8½	d. 6½	s. d. 8 8	d. 2¾
Oats	2½	10 6	9	6½	8 8	1½

The charge per ton for other produce and goods is at least 12s. 6d. per ton through to Launceston.

Westbury at 6½d. per ton per mile, 34 miles, comes out the same as carters, *i.e.*, 6d. and 4d. per bushel; their present tonnage per mile per ton being 10d.

S.

COMPARATIVE Return, founded on Mr Doyne's Traffic Returns, at page 10 of his Report.

Of 21,000 tons given by Mr. Doyne for export in 1860, 8289 came by Turnpike, Main Road; 12,711 came by Turnpike, Westbury Road.

Say 8289 tons for 14 miles, 12,711 tons for 40 miles, average 29¾ miles, not 21. 21,000 tons carried 29¾ miles, at an average mileage of 4¼d., produces a little more than 21 miles at 6d., (say) equal to £11,025.

Adopting this average, his Paper would stand thus:—

21,000 tons carried for export 29¾ miles at 4¼d. per ton per mile	£	s.	d.
The excess of Goods carried through the Gates above the quantity exported was 24,661 tons; and half of this equals 12,100, and was carried (say) 25 miles, at 4¼d.	11,025	0	0
Cattle and Horses 4500, carried 21 miles at 3d. per mile, and no credit taken for sheep, &c.	5,432	0	0
108,757 Passengers (47,911 Westbury Gate, 60,846 Main ditto,) rode through the Gates, at an average of 24 miles at 1½d. per mile, these would produce	1,180	0	0
	16,313	0	0
TOTAL	£33,950	0	0

T.

ABSTRACT of Returns of Traffic (1860), taken at the Turnpike Gates on the Main and Westbury Road, (at Prospect.)

	Main Gate.		Prospect.
Grain	3554	Grain	12,621
Flour	2824	Flour	1053
Potatoes	142	Potatoes	1053
Hay	1935	Hay	1768
Wool	376	Wool	147
Bark	1049	Bark	738
Bran	242	Bran	139
Goods, general	3954	Goods, general	4597
TOTAL	14,076	TOTAL	21,591

Allowing for short Mileage Traffic on Westbury Road, one eighth, *i.e.* 2699 tons, gives—for Main Gate, 16,775 tons (say) 12 miles; Prospect, 18,899 tons (say) 40 miles: an average haulage of $26\frac{3}{4}$ miles at 4*d.* per ton per mile.

	£	s.	d.
Say—35,674 tons carried $26\frac{3}{4}$ miles, at 4 <i>d.</i> per ton per mile	15,904	0	0
Wood, not included above 10,590 tons, (say) one half—5295, only carried 10 miles, at 4 <i>d.</i> per mile	880	0	0
Cattle and Horses 4500, leaving out sheep and pigs; and (say) 26 miles at 2 <i>d.</i> per mile	975	0	0
Passengers, 108,757, carried (say) 24 miles at $1\frac{1}{2}$ <i>d.</i> per mile	16,313	0	0
TOTAL	£34,072	0	0

V.

INTERROGATORIES WITH REFERENCE TO TRAFFIC, &c.

LAUNCESTON AND WESTERN RAILWAY—DELORAINÉ AND THE WESTWARD.

The portion of the traffic upon this Railway Line by the Turnpike Roads, which arrives at and departs from Launceston,—and which is called in Railway language “the through traffic,”—can be tolerably accurately ascertained by Returns taken at the Turnpike Gates near Launceston; but there is a quantity of “local” traffic between Delorainé and Westbury, Carrick, Bishopscourne, and Longford, and between the latter places themselves, which will not appear in the “through traffic,” and cannot, therefore, be easily ascertained, except by the assistance of those gentlemen, residents of the Districts, who are well acquainted with their resources and extent of trade carried on. With a view to obtaining this valuable assistance, the following Questions are submitted to you:—

1. Of what does this local traffic consist? What is the cost of conveying it by cartage? And what has this cost been at various times?
2. Would the Railway have the effect of further developing the existing local traffic, and creating new sources of local traffic, and, for the same reasons, developing and increasing the “through traffic”?
3. Will the facilities afforded by the Railway cause the useful application of any produce that at present goes to waste?
4. Would increased facility for the transmission of produce to market, and for the transport of building materials, farm implements, drain pipes, &c., enhance the value of property in the neighborhood of the Railway; and to what extent? What is cost of building materials—bricks, stoneline, &c.—at Westbury and Delorainé? Where are they purchased? And what effect would the facilities of the Railway have on the consumption of such articles?
5. What is the present cost of firewood on the Township of Delorainé?
6. Would not the facilities afforded by Railways, for the conveyance of horses, cattle, sheep, &c., be attended with important advantages in the saving of time and cost, and the absence of deterioration and loss, by fatigue?
7. What is the present selling value of land in the District approached by the Railway; and what has it been at various times?

8. What is the cost of maintaining the Western Road; and what are the areas of the Districts rated for that purpose? In the event of Parliament requiring that the owners of property in the Districts affected by the Railway shall become responsible for any deficiency in the profits of the Railway to pay the guaranteed interest upon its capital, what system of assessment would best meet the occasion?

9. What Assessment Rolls are there at present? And would the principle upon which they are made be equitable for an assessment for the Railway?

10. What is the usual price of the post and rail fencing used for the enclosure of cultivated lands?

10th February, 1862.

W. T. DOYNE.

MINUTES of Meeting held at the Deloraine Public Library, 17th February, 1862; A. F. ROOKE Esq., M.H.A., in the Chair.

THE Chairman read Memorandum from Mr. Doyne, requesting information respecting the local traffic, of the District. After discussion, the following Replies were unanimously agreed to:—

1. Grain, sawn and split timber, lime, spokes and felloes, shingles, palings, dairy produce of all kinds, flour, bran, pollard, bark, fruit, potatoes, poultry, pigs, sheep, cattle, garden produce. Present cost of cartage:—beyond Deloraine, 2s. 3d. per ton per mile; to or from Deloraine and Longford, and intermediate Townships, 1s. per ton of 2000 lbs. per mile. The rates of cartage are lower than any previous year, and have varied up to 3s. per ton per mile.

2. Undoubtedly; as large quantities of posts and rails, and split and sawn timber, would be sent to Evandale, Perth, Longford, and Cressy, as well as the White Hills; and all the existing articles of local traffic referred to in first answer would be increased from 50 to 1000 per cent. In lime, for example, a large increase would take place; also firewood, freestone, hay, straw, slate, fish, ship timber, &c.

3. Yes; fruits, potatoes, straw, vegetables, &c.

4. Very considerably. Agricultural and other lands would be increased from 25 to 100 per cent., an building allotments from 100 to 1000 per cent. The present cost of building materials at Deloraine:—bricks at the kiln 30s., or delivered at buildings, 40s. per 1000; stone, quarried, 4s. per ton; lime, retail, 10d. per bushel; sawn timber, 11s. per 100 feet; shingles, 14s. per ton; palings, 7s. per 100; laths, 13s. per 1000.

5. Retail prices of firewood at Deloraine, 7s. per ton.

6. All fat stuff would be sent to market by Rail, and a considerable portion of store stock would come up by Rail.

7. Present value of agricultural land from £3 to £15 per acre, according to circumstances, quantity, quality, improvements, &c. Agricultural land has been sold at £32 per acre. Sixteen years ago the very highest price for the best agricultural lands, with improvements, was about 40s. per acre. The present value of Town allotments is from £20 to £200 per acre. Farms let at from 10s. to 25s. per acre. The value of land varies much in different parts of the District, and is materially affected by its proximity to, or remoteness from, the present Western Road.

8. £550 per annum, or £190 per mile; and the Road, notwithstanding this expenditure, in a very bad condition. The area of the Districts can be obtained from the Government charts.

9. A per-centage on the value of property to be ascertained by the Valuation Rolls then in force, will be equitable for that purpose; and any such assessment should also be levied on crown lands not now included in the various Rolls, as these lands will be greatly enhanced in value.

10. The price of post and rail fencing is 4s. 6d. per rod, including material.

A. F. ROOKE, *Chairman.*

W.

INTERROGATORIES.

LAUNCESTON AND WESTERN RAILWAY—LONGFORD DISTRICT.

1. What are the principal articles which constitute the traffic between Longford and the other points which will be connected by the Railway?

2. What is the cost of carriage for these at present; and what has it been at other times?

3. What articles, in addition to those enumerated, would be likely to be added to the traffic by the facilities of Railway communication?

4. The population of Longford and neighborhood, including Perth?
5. Average value of lands per acre,—say within five miles?
6. Rates at which farms let, average and best?
7. What, in your opinion, would be the influence of Railway upon the value of property in this neighborhood?
8. Cost of fuel, building materials, bricks, lime, sand, and timber? Would these be affected by Railway carriage?
9. Carriage of agricultural implements, cattle, &c? What effect would follow?
10. Generally, any information which you can give on these questions, which are put with a view of obtaining well-considered data upon which calculations can be made as to the tolls which may be expected to arise from the Railway traffic, the benefits which will arise to the owners of property by the facilities afforded, and the rates which would have to be levied to meet any deficiency in the profits of the Line.

W. T. DOYNE.

Longford, 28th December, 1861.

REPLIES by H. B. NICKOLLS, Esq.

1. Wheat, oats, barley, potatoes, hay, straw, manure, bark, wool, sheepskins, hides, tallow, sawn and split timber, firewood, coal, stone, lime, butter, bacon, hams, fruit, greens, and sundries.

2. Wheat 4*d.* a bushel, 13*s.* 4*d.* a ton; oats 2½*d.* a bushel, 12*s.* 6*d.* a ton; barley 3*d.* a bushel, 12*s.* a ton; wool, hay, posts and rails, coal, potatoes, and straw, 20*s.* per ton; sundries, from 15*s.* to 20*s.* ditto; bark, 20*s.* ditto; sawn timber, 3*s.* per 100 feet; split timber, 5*s.* per 1000; lime from Launceston, 1*s.* per bag; ditto Deloraine, 2*s.* 6*d.* ditto.

Two years ago 20 per cent. higher. Has been double the present rates. The present rates hardly pay.

3. Milk, fresh butter, vegetables, fruit, plants, eggs, poultry, cheese, live stock, carcasses, stone, timber, ballast, charcoal, slates, and a large increase in hay, straw, manure, sawn and split timber, and firewood; besides transfer of much of the traffic in lime and split timber to the Line from Deloraine instead of from Launceston.

4. Police District—Longford, Perth, Cressy, Bishopsbourne, and Carrick, 6000.

Norfolk Plains—Longford, 2400; and Perth, 1000. Total, 3400,

Acres in Police District, 590,720.

5. From £7 to £8.

6. Pastoral land, 8*s.* Average rate, 12*s.*—and rather high for the times.

7. To increase its value very much,—certainly not less than 50 per cent.

8. Bricks 40*s.* per 1000; lime 4*s.* per bag; sand 4*s.* per load; sawn timber 12*s.* per 100 feet; firewood 9*s.* to 12*s.* per ton—in winter 20*s.*

9. The facility would induce a traffic in implements, fat cattle, and store sheep; but the latter, going westward, must be carried at a cheap rate.

10. The Railway, by its rapidity and certainty, will confer great benefits upon the population of this District, enabling capital to be steadily employed by the steady supply of labor, and relieving the farmer from the embarrassment of a crop so heavy that it cannot be got to market. It is quite needless to consider the mode of an assessment, which will never be required.

The Railway would ensure regular means and cost of transport, saving the farmers from loss by forced sale, and the public from loss by the unreasonable fluctuations in prices. Travelling would be so easy and rapid by Rail, that the road rates would be reduced, and though the Rail might not quite pay for itself at the first, it would do so eventually, and would never press hardly on ratepayers. Large Districts west of Deloraine would be made accessible. There are well-timbered crown lands worth now only 10*s.* per acre.

H. B. NICKOLLS.

REPLIES by W. DODERY, Esq., M.H.A.

1. Wheat, oats, barley, hay, straw, wool, sheep-skins, sawn and split timber, potatoes, coals and firewood, stores, all description of merchandise, manure, and lime.

2. Wheat 4*d.* per bushel, oats 2½*d.* ditto, barley 3*d.* ditto, wool 20*s.* per ton, hay 20*s.* per ton, sawn timber 4*s.* per 100 feet, posts and rails 20*s.*, coals 20*s.* per ton, lime from Launceston 1*s.* per bag, ditto from Deloraine 2*s.* 6*d.* per bag, potatoes 15*s.* to 20*s.* per ton, general merchandise from or to Launceston 20*s.* per ton. At other times the charges have been more than double.

3. The facilities of Railway transit would bring a great quantity of sawn timber, paling, posts and rails, shingles, and lime from Deloraine; all which are now brought from Launceston, simply because the means of transit by horse-team is more easy and frequent than from our stringy-bark forests or Deloraine. A great part of the lime used here is brought from Victoria, although the Western Country abounds with much superior limestone; and lime would be much used in farming operations if it could be conveyed cheaper. Straw always sells well in Launceston; and the Town could be much better supplied only for the expense of cartage. Large stacks of good straw have been destroyed by burning, in order to get it out of the way. In the Stringy-bark Forest, about 12 miles from the proposed Railway Line, there is an excellent quarry of freestone, said to be equal to any in the Colony. A large quantity of produce consumed upon farms, such as eggs, butter, poultry, pigs, &c., would be sent to market by Rail, but not now in consequence of the difficulty of transit. This description of produce would be increased immensely, as a payable market is always open in Victoria, and would enable the small farmers in this and the Western District to provide the means to meet current expenses of the household, and enable them to bring their annual crops to market when prices suited, not as now, be compelled to sell at any price, to meet the storekeeper's account, and with the prospect of going on again in debt for another year. A vast quantity of timber, available for fuel, is annually wasted for the purpose of clearing the land. Cattle and sheep would be forwarded by Rail, and Launceston be regularly supplied from the rich pastures of the Western Country. At present, the butchers find it more convenient to purchase Victorian stock, as it is sent over in small quantities. The butchers have not convenience to receive large quantities of stock, for, if they do, they fall away, which is a loss not only to the butcher but to the consumers. By a Railway, this would be avoided; the stock forwarded fresh and healthy from the pastures, and just in such quantities as required,—a material advantage to the small farmer who has of producing only a limited quantity of stock.

4. The population of Norfolk Plains about 3400, which includes Perth and Longford; but the population of the Police District is about 6000, and the acreage 590,720.

5. Seven Pounds per acre.

6. Rentals are various,—some wheat, others money; but, as an average, I think 10*s.* per acre would not be far out.

7. I am of opinion that a Railway would largely increase the value of property in this neighborhood.

8. Bricks 40*s.* to 45*s.*; lime 4*s.* to 5*s.* per sack of 3 bushels; sawn timber 12*s.* to 14*s.* per 100 feet; fuel wood 12*s.* per load,—in winter 20*s.* Increased demand would of course excite increased industry and occupation. The price of timber, lime, and fuel would no doubt be reduced by the cost of carriage.

9. As the Line would be short, many store cattle and sheep would not be sent by Rail unless the expense of transit was less than in driving; but fat stock, I should think, would invariably.

10. The greatest amount of benefit in the establishment of a Railroad to Deloraine would be felt by the occupiers and proprietors of the Western Districts, as it would place them within easy, quick, and certain communication with Launceston. Let alone the high charges made for cartage, there are times when produce could not be got to market at any rate of cartage; the consequence of which is, that the farmers have to thresh and deliver immediately after harvest on purpose to get the grain to Town. The market is, therefore, glutted for the time.

With regard to the amount of rate to be levied to meet any deficiency in the profits of the Line, that is a matter I think you could best fill in yourself, as I confess I have not sufficient knowledge of the expense of working such a Line. But, at any rate, I anticipate it would not be heavy, as the Line would be earning something towards the expenses, and all would not be loss. Besides the facility, regularity, and comfort to passengers would compensate by economising time and expediting business. Like many other new undertakings, it might not pay all expenses at first; but I feel convinced that ultimately it will, and prove the cheapest line of roads we can make.

WM. DODERY, *Lauraville.*

FINANCE Memo. respecting the Launceston and Deloraine Railway, Tasmania.

1. The Australian Railway Debentures bear interest at two different rates,—the first 5 per cent., the second 6 per cent. I see that the former are generally quoted at about par in the London Market,—sometimes 1 to 2 per cent. below; and that the latter are generally at about 5 to 6 per cent. premium,—sometimes 7 or 8; the average difference between the selling value of the two being perhaps 6 to 7. In each case the principal is to be repaid in full at the end of 25 or 30 years. The Colonial Government guaranteeing the principal and interest.

2. Would Tasmanian Railway Debentures, guaranteed by the Government of that Colony, bring about the same price in London?

3. Would postponing the time of repayment to 40 or 50 years affect the selling price of these securities, the rate of interest being the same; and how, and to what extent? What would be the effect of not repaying them for 99 years?

4. If Debentures to be repaid by the Government at par in 30 years, and bearing 6 per cent. interest, only enable them to raise 6 or 7 per cent. more capital than they can obtain for similar Debentures bearing 5 per cent., it appears to me that the latter are more advantageous terms for the Government to borrow their capital upon, as the extra 1 per cent. for 30 years is a heavy price to pay for 6 or 7 per cent. premium at the outset. Why then are these Debentures issued? Is there any advantage to account for this apparent discrepancy?

5. The Debentures to bear 5 per cent. interest, and to be redeemed at par in 50 years. A sinking fund of 2 per cent. per annum to be created; the proceeds of which to be annually expended in the liquidation of the Debentures when they can be purchased below par; or to be invested in similar securities, and the interest accruing to go towards paying the interest on the debt, the principal so obtained to be applied to the liquidation of the debt whenever the market is favorable.

6. It may be thought advisable to levy the latter sum of 2 per cent. on the lands in the neighborhood of the Railway, in the event of the Railway profits not proving sufficient to meet the entire interest.

W. T. DOYNE.

1st August, 1861.

COPY of a Letter enclosing the Notes by LOWNDES, SURGERY, & WOOLLEY, in reply to Mr. DOYNE.

1 Royal Exchange Buildings, London, 25th October, 1861.

LAUNCESTON RAILWAY, TASMANIA.

DEAR SIR,

OUR notes on your Memorandum contain all we have to say on the subject of your letter, except as regards the probability of getting up a Company in this country in case the Colonial Government should refuse to raise the necessary capital by a loan. This, we are quite confident, would be impossible. No amount of "estimated traffic" would induce the public to embark in a Colonial Railway. The Geelong and Melbourne Railway, guaranteed by the Victorian Government, gave the finishing stroke to all hope of the guarantee system "going down" in this country.

As we said in our notes, the only hope of success is to have a direct loan on the security of the Government and Legislature. The better plan in raising such a loan is to invite public tenders either at a fixed price or by biddings, fixing a minimum price as is done by the Victorian Government.

Yours truly,

LOWNDES, SURGERY, & WOOLLEY.

NOTES on Mr. DOYNE's Memorandum on Launceston and Deloraine Railway.

1. New South Wales being the oldest established Colony, and enjoying consequently better credit than Victoria, is enabled to borrow in the London Market on more favorable terms. She does not, however, obtain quite par for her 5 per cent. Debentures: probably about 97.

2. The best Stock Exchange authorities we have consulted are of opinion that an issue of Bonds by Tasmania would hardly be effected at a better price than 90 for 5 per cent. or par for 6 per cent. Terms slightly more favorable would, no doubt, be obtained at the present moment, money being very plentiful. We should observe, however, that Victorian 6 per cents. are in great disfavor just now, investors being alarmed by an article in the *Times* alluding to the strong democratic tendencies of that Colony. New Zealand floated their issues at about par; the Cape at 3 per cent. premium—interest in both cases 6 per cent.; while the present Tasmanian Loan is quoted about par.

3. The humour of the market would be the best suited by adhering to the ordinary plan of fixing the time of repayment at 25 or 30 years. Any materially longer date would, from its novelty, deter inventors. It might, however, be desirable to adopt the plan of Ceylon and British Guinea, of borrowing for 7 years, if Tasmania had a surplus Revenue sufficient to replace the capital in that time, which she probably has not.

4. The only reason 6 per cent. Debentures are issued is, that a lower interest will not float a Loan; the premium usually attained afterwards is what induces the public to subscribe.

5. The simple course would be to adopt the plan of the Victorian Government; viz.—to borrow the necessary capital on the most favorable terms, and construct the Line as a Government property. The proposed Sinking Fund would have a very good effect if, for instance, the Bonds were 5 per cent., and issued at 90—95, and redeemable by annual drawings at par; or if the Bonds were 6 per cent., and the Sinking Fund were invested in the open market. This, however, would involve charges for Agencies and so forth, and entail a certain complication, which would, perhaps, outweigh any advantage; and it would, on the whole, be better to make these Debentures as like those of the other Colonial Governments as possible.

6. This would be a point for the consideration of the Colonial Government, but would in no way affect the English subscribers, who would look to that Government alone as their security, and who would, as in other similar cases, prefer being in no way mixed up with the Railway; *though the fact that the Government wanted the money to make one, would have a very assuring tendency.* It is a much more economical mode to borrow than to guarantee on a certain capital, the public here having been so often bitten by estimated capital proving insufficient, and involving a corresponding dilution of dividend, as must arise from new projects on the guarantee principle. As an instance of failure in this respect, we may name the Pernambuco Railway, guaranteed 7 per cent. on a fixed capital by the Brazilian Government, which is at some 20 per cent. discount (from the capital having been exceeded), though Brazilian 5 per cent. Debentures are at par.

LOWNDES, SURGERY, & WOOLLEY.

1 Royal Exchange Buildings, 25th October, 1861.

Y.

MINUTES of Public Meeting of the Inhabitants of the Northern Districts of Tasmania, held in Launceston on the 6th day of June, 1862, at noon.

The 1st Resolution was moved by John Crookes, Esq., M.H.A., and seconded by T. B. Bartley, Esq.—“That the early construction of a Railway between the Towns of Launceston and Deloraine, through the Districts of Evandale, Longford, and Westbury, is of the greatest importance to the interests of the Colony.”

2. Proposed by the Hon. W. S. Button, Esq., M.L.C., and seconded by Mr. James Castley—“That the Resolutions adopted by the Public Meeting of the Northern Colonists, held in Launceston in 1857, having for their object the promotion of this undertaking, have derived additional force and importance from the recent completion of extensive Railway Lines in Victoria.”

3. Proposed by John Atkinson, Esq., J.P., and seconded by Mr. David Beveridge—“That the following Petition to His Excellency the Governor in Council be adopted:—

“To His Excellency the Governor in Council, &c. &c. &c.

“The humble Petition of the undersigned Colonists, residing in the Northern Districts of Tasmania, in Public Meeting duly assembled at Launceston in the said Island.

“RESPECTFULLY SHOWETH:

“THAT your Petitioners are anxious for the early construction of a Railway from Launceston to Deloraine.

“That the recommendation contained in the Report of the Joint Committee of both Houses of Parliament in 1860 having been now fully complied with, so far as it is in the power of the people themselves to accomplish this, and your Petitioners fully approving and concurring in the recommendation comprised in the said Report, that, on the Government guaranteeing the payment of interest on the required loan, the Districts should re-guarantee the same to the extent of one-half the amount at any time so paid out of the Public Treasury.

“Your Petitioners therefore humbly pray that Your Excellency will cause a Bill, authorising the construction of the said Railway, and embodying the aforesaid provisions, to be submitted to the consideration of the Parliament at their next Session.

“And your Petitioners, as in duty bound, will ever pray, &c.”

4. Proposed by Mr. Montgomery, and seconded by Mr. White, jun.—“That Sir Richard Dry, Knight, the Chairman of this Meeting, in the name and on behalf of the Colonists, be requested to transmit a Copy of these Resolutions to every Member of each House of Parliament, with the request that he will be pleased to give his cordial support to the prayer of the said Petition.”

R. DRY, *Chairman.*

Z.

MINUTES of Proceedings at a Public Meeting of the Inhabitants of Launceston and the Northern Districts, held at Launceston, 14th July, 1862.

THE object of the Meeting, as set forth in the advertisement convening it, was “for the further consideration of the question of the Launceston and Western Railway, with special reference to the decision of His Excellency the Governor in Council on the proposed Railway Bill, and on which decision the General Committee, appointed by the Public Meeting of 1857, are desirous of taking the sense of the Public, before proceeding any further with this all-important measure.”

It was moved by W. P. Weston, Esq., of Longford, and seconded by R. H. Douglas, Esq., of Westbury—“That this Meeting desires to confirm the Resolutions of prior Meetings of the Districts,—‘that it is essential the Launceston and Western Railway should be constructed as early as practicable, after due enquiry in a Select Committee of the House of Assembly;’ and that the present Committee be hereby requested to continue their efforts to this end.” And this Resolution was carried unanimously.

RICHARD DRY, *Chairman.*

A 2.

ESTIMATE of the Cost of the Launceston and Deloraine Railway.

[DOYNE’S REPORT, PAGE 5.]

Miles.		Rate per Mile.	
		£	£
44	Preliminary Expenses	70	3,080
—	Land and Compensation	50	2,200
—	Contract Works	3,629	159,676
47	Permanent Way	2,684	126,148
44	Stations, Sheds, and Workshops.....	500	22,000
—	Rolling Stock.....	682	30,008
—	Engineering and Survey	400	17,600
—	Law and Valuing	50	2,200
—	Sundries and Interest	1,000	44,000
—	Direction and Office Expenses.....	114	5,016
TOTAL by Mr. Doyne.....		—	£411,928
—	Add—Additional Compensation for Land.....	450	19,800
—	New Wharf at Launceston Station.....	—	10,000
—	Contingencies Profit, &c.....	10 per cent.	44,172
			£485,900

Large Warehouses for Produce, and a new Bridge, will also be required at the Launceston Goods’ Station.

W. R. FALCONER.

Read in Select Committee, 7 August, 1862.

A 3.

EXTRACTS from the Evidence of JOHN WHITTON, Esq., M. Inst. Civil Engineers, Engineer-in-Chief of New South Wales Railways; taken before Select Committee of Legislative Council, Sydney, Session 1857. Put in by the Promoters, as illustrating and confirming some points of Mr. Doyne’s Report, but including also some comparative Statements respecting Railways and Tramways :—

4. What steps would you suggest as being most advisable to improve our roads, or rather what do you think would be the best mode of communication with the interior of the country? Where they are practicable, and where the traffic would justify the expense, I should recommend Railways.

7. What do you apprehend would be the price of constructing such a Line as that from Parramatta to Liverpool over the portions of country with which you are conversant—take the Line from Campbelltown to Picton? From Campbelltown to Menangle, as a single line, both way and works, it would cost about nine thousand pounds a mile, and from Menangle to Picton about twelve thousand. I am not prepared, at present, to speak confidently; for the estimates are not yet made.

12. In the construction of a Line through the difficult portion of country you speak of, might not the cost be greatly minimised by using curves of smaller radius and steeper gradients than are generally adopted? There is a certain limit, beyond which you cannot use either curves or gradients with advantage. Much depends upon the speed you wish to attain. If you require to travel at the rate of fifty miles an hour, you must have curves in proportion; but if you limit the speed to fifteen or twelve miles an hour, you can do with curves of less radius.

13. If you were only to go at a speed of from fifteen to twenty miles an hour, you would then be able to use curves of small radius? Yes; you can work curves of twelve chains radius, and inclines of one in forty; but in working these inclines you would require more powerful engines.

30. You are not acquainted with the interior of the country? I am not. I could give a guess what Railways would cost in the interior, but I do not approve of guessing, it can lead to no beneficial result. I differ from the opinion generally entertained in the Colony with regard to the construction of Railways. My opinion is that the traffic on Railways should not only pay the working expenses, but also the interest of the money borrowed for their construction.

31. Have you any reason to believe from what you have seen of the working of the Sydney Railway that such is the case with that Line at present? I am satisfied it is not.

32. Do you think it might be made to do so if the Terminus were brought from the top of Brickfield Hill towards the wharves? I do not think it would ever pay without better management. I think no Railway could be managed worse than it is now.

62. Have you turned your attention at all to the extension of the present Railway westward from Parramatta? Yes.

67. Has that been thoroughly surveyed with reference to the formation of the Line? *Quite sufficiently for the preliminary estimates.*

68. Are there any engineering difficulties on the Line? None whatever.

69. What is the steepest gradient necessary? One in eighty.

70. That is perfectly feasible? Yes.

71. Have you any preliminary estimate of the expense? Yes.

73. Are you enabled to state what is the average? The average of the two Lines to Penrith and Windsor will be under eight thousand pounds a mile—that is exclusive of the land.

76. Does your estimate include the expense of forming stations? Everything.

77. Not the rolling stock? Not the rolling stock.

78. Would the rolling stock at present on the Parramatta Line be sufficient for the purpose? No.

79. Then additional expense would be necessary on that account? Yes.

80. Would the amount be material? No, it would not be a very serious matter. Of course the quantity of rolling stock you require depends upon the number of trains you propose to run. You run more trains on the Sydney line than the traffic requires. On the Windsor and Penrith Lines I think three trains each way would be quite sufficient, and the rolling stock then required would be very small. The total distance from Parramatta to Penrith, including the Windsor branch, is about thirty-five miles. In England the cost of rolling stock varies from £2000 to £3000 a mile.

81. Perhaps half that sum would be sufficient for the purpose here? Yes, quite so.

86. Does your estimate include the cost of rail of seventy-five pounds to the yard? Yes; and includes the freight from England. I have no doubt, whatever, it can be done for less than eight thousand pounds a mile.

87. What description of stations do you propose? Only wooden ones—small buildings. I think it a great loss to erect large and extravagant stations for a small traffic.

108. Have you made any calculations as to the cost of constructing a tramway such as is used for horses? I have made no calculation, and I am quite satisfied no person can make anything like a satisfactory calculation till he knows the country through which he is going, and provides himself with proper plans and sections.

109. Supposing the country to be precisely the same in both cases, could not a horse tramway be constructed at much less expense than one suitable to be worked by locomotive engines? I think not.

110. Will you have the goodness to explain to the Committee the reason? My opinion is, that the only difference you could make between a railway and a tramway, the gradients being the same, would be in the weight of the rails. A tramway would be in every respect the same as a Railway, except that the rails would be a little less in weight. The sleepers, chains, and excavations, to be useful, must be the same. A tramway would be very well for taking produce to a Railway, where it would be seldom used, and only for the accommodation of a few persons. It would then be of little importance whether or not it was kept in a good state of repair. I do not see how by possibility you can make a tramway much cheaper than a Railway. The only difference is in the weight of the rail.

111. That is very immaterial? Yes. You might for an ordinary tramway use a rail of forty-five pounds to the yard instead of seventy-five.

112. What would be the difference of expense in a mile of rail or tramway according to those respective weights? There would be a difference of about forty-six tons—say £480 a mile.

113. That is the only difference you think there would be in the expense of a Railway and a tramway? Yes.

114. Are you prepared to state what would be the difference in the working expenses? No, I am not prepared to say positively; but if there were a sufficient amount of traffic you would be able to work it much more economically by locomotives than by horses. The power of horses is limited to a certain amount of traffic, and when it exceeds that limit, the Line could be worked far cheaper by locomotives. Another thing to be taken into the calculation is the speed, which is of very great importance in estimating the difference of advantages to be derived from locomotive Railways and from tramways. I think speed is generally left out of the question altogether.

115. What would be the difference of speed between the two? The difference of speed would be entirely in proportion to the weights to be taken. A horse travelling at the rate of ten miles an hour could take a very small load; but the weight makes very little difference to a locomotive, so long as it does not exceed two hundred tons.

116. Would there be any very material difference in the expense of maintaining a Railway over that of maintaining a tramway? There would, of course, be some difference in the expense, on account of the difference in the weight of the trains; but

XX

I do not think it would be material. I do not think that on a tramway we could do with much less than a man to a mile to repair it, and on a Railway we ought to do with a man and a half.

119. What is the greatest rate of speed that could be attained with horse power? The greatest rate I should expect would be ten miles an hour. Besides the cost of making the tramway, if you use horse power, *you must have a macadamised road.*

124. With respect to the comparative cost of working the traffic by horse or locomotive power, could the line to Parramatta be worked by horses as cheaply as by locomotives? Certainly not. In fact the traffic could not be carried on by horses. Besides which, I think it is an act of the greatest possible cruelty to work horses at ten miles an hour in such a climate as this, and every one ought to use his utmost power to do away with it.

125. Do you, in calculating the cost of making Railways, include the expense of fencing? Yes, in all cases.

126. If there were a difference in the gradients, would there be any great difference in the expense of working? *The expense of working would be increased by using steeper gradients.*

Mr. JOHN WHITTON called in and further examined.

1. Are you prepared to state the comparative cost and advantages of Tramways and Railways, worked by horse power and by locomotive engines, respectively? When I was examined by the Committee on a previous occasion, I said the only difference was in the weight of the rails, and that the cost of construction of the works would be the same in each case, provided the gradients were the same. From all the papers I have been enabled to look at since I was here, I find that the advocates of tramways admit that the cost would be the same in all cases, provided the same gradients are used; and that the cost of haulage will be less by steam than by horse power. In a paper by His Excellency the Governor-General, published in the *Sydney Magazine of Science and Art* for August, I find the following statement:—"In comparing the cost of constructing a macadamised road or railroad, when the gradients are the same, all that is required is to determine the relative cost of covering the former with metal and of laying down the rails on the latter—the items for fencing, drainage, including bridges, culverts, &c., will be the same, or nearly the same, in each, the advantages being a little in favor of the railroad—as from its narrowness, the width of bridges, culverts, &c., would not be so great as upon the turnpike road." This is His Excellency's opinion with regard to the first cost, provided the gradients remain the same. Afterwards I find, in framing the estimate, that the total cost is assumed to be £3000 a mile for turnpike road; £3500 for horse railroad or tramway; locomotive railways being assumed to cost £12,000 a mile. But I think it will be seen from this, that in the sum of £3500 for tramways, there has only been allowed £1300 per mile for bridges, culverts, and earthworks. It has been assumed in this estimate that the cost for *works* will only amount to £1300 per mile.

2. It was assumed in that case that the rails would be laid upon the ordinary roads of the colony? Yes, I believe so; but I think it will be found practically impossible to work tramways with gradients as steep as many of the inclines on the existing roads. There can be no doubt that the cost of haulage *would be less by steam than by horse power.*

3. What is the difference? The cost of working, according to the Paper from which I have just quoted, would be—on turnpike road, £1077 10s.; horse railway, £300; and locomotive, £153 1s. per mile—so that the actual cost of working a locomotive line would be about half the cost of a horse tramway, and about one-seventh that of a working turnpike road.

4. There would be a great difference also in the number of persons employed? Yes, undoubtedly.

5. I speak of the actual working? The actual working of tramways would, of course, include shops for repairs, and although the costly locomotive shops would be dispensed with, yet you must have shops for the repair of carriages.

6. I have not made myself understood—I refer to the difference in the number of persons required to be employed on a line drawn by horses and one drawn by locomotives? You require far less on a line where locomotives are used than where horse power is employed; the traffic being the same on each.

7. Can you state the proportion—would it be one-half, one-quarter, or what? It would depend very much upon the manner adopted for working the traffic. On a horse tramway, probably two or three trucks would be considered a train; which I think would be as much as could be taken with two horses. For such a train would be required a driver and a breaksman; and very likely the whole weight would not be more than from sixteen to twenty tons. With a locomotive, you would require two men on the engine, a fireman and driver, and one guard. With these three men you would take on an ordinary gradient, say two hundred tons; so that you would have only one man more employed to take two hundred tons by Railway than you would to take twenty by horse tramway.

8. How many horses would you require to take a load of from sixteen to twenty tons? Two horses.

9. Would two horses take from sixteen to twenty tons, on a tramway laid on the inclines of our turnpike roads? Certainly not. I am assuming that you have a proper road.

10. Then you would assume that the first cost of one would be as great as the first cost of the other? I believe the only difference is the weight of the rails.

11. What do you think would be the average weight that could be taken by the horses on the tramway laid upon the gradients of the present turnpike roads? I think there are some roads where it would be difficult for a horse to draw up an empty cart. The Railways, I find in a paper in this Magazine, are assumed at £40,000 a mile; now, the actual cost of those now being constructed and of those contemplated does not exceed from £11,000 to £12,000 a mile; and the cheapest will cost about £7000 a mile, exclusive of land. I wish to show the Committee that, on these lines, the cost of the permanent way alone is not so greatly in excess even of the tramway. The cost for the road we are now laying down is £3710 per mile.

12. Where is that locality? Between Liverpool and Campbell Town. The estimate made for the permanent way on a horse tramway is £2140 per mile, but I think that is a low estimate.

13. What do you include in your estimate of £3710? Rails, chairs, fish plates, bolts, keys, sleepers, ballast, and road laying.

14. Not fencing? No; the amount of £3710 is for permanent way only.

15. Do you include the levelling and removal of earth? No, that is not included in the £3710; but I wish to show the Committee that the permanent way is only a portion of the expense in the construction of any Railway. On the line to Penrith, for instance, the cost of earth-work alone will be about £3000 per mile; the cost of fencing, £360; for bridges and viaducts, nearly

£500; the cost of culverts, £60; of permanent way, £3710; of level crossings, £300; clearing the land of timber, I cannot exactly get at, but I assume it to be £30; of sidings £190; and of stations, about £243; the total of that would be nearly £8412 10s. per mile, exclusive of land.

19. What weight of rail do you provide for in your estimate? Seventy-five pounds to the yard.

24. The American Railways cost a great deal for Repairs? Yes; some of them as much as £800 per mile per annum.* Railways in England cost from £200 to £300.

25. Then, in a series of years, the more costly Railways of England would prove eventually to be the cheapest? Yes, no doubt. The Americans, I understand, are reconstructing a great portion of their lines at present.

* Mr. Doyne estimates the large sum of £600 per mile per annum.

A 4.

THE Hon. W. S. BUTTON, M.L.C., requests to put in the enclosed Newspaper extract, referred to in his Evidence before this Committee, on the 7th August.

Possibility and Importance of Cheap Goods Traffic on Railways.

I WILL show you the importance as regards this traffic of a level line. To passenger traffic directness is essential. Every mile saved is two minutes saved, because passenger trains are so much below the power of the engines; although they are a little retarded in ascending, they make it up very nearly in descending. But the train never approaches the point at which the engine is brought up—I mean an ordinary train, with the engine in good order; and, therefore, as regards passenger traffic, providing the gradients are within reasonable limits they are not material to the speed, or even to the load; but when you come to have a coal traffic and a mineral traffic, which must be at a low cost, because it will not bear the charges which a Railway is compelled to make—it is a totally different thing. Gradient, as regards coal traffic, has the same effect that distance has with regard to passenger traffic. Now I should observe that the promoters stated that they would work the line, putting the rolling stock on, at half a farthing per ton per mile, and I applied my mind to see upon what ground that was established. I find that the loads they calculated upon taking at the rate of 15 miles an hour, are loads which engines are taking when measured by the gradients over which they pass, and therefore the engines may do it. Then I know that at 15 miles an hour the wear and tear are reduced to the minimum, and the rolling stock will last as long as it would live, except from the effects of decay. The engines and the permanent way itself are subject to the most moderate action, and the cost of their maintenance reduced to the smallest possible amount. Then I investigated the elements of charge, because they are free from all the heavy expenses of passenger establishments, stations, and attendance; the liberty to pass roads anywhere they please, because the trains are not to pass at the rate of 50 miles an hour. The trains are under control, and I am perfectly satisfied they can do it for half a farthing per ton per mile, and even with a profit.—*Gardener's Chronicle*, March 29, 1862.

A 5.

EXTRACT from Mr. Doyne's Letter to the Committee, authorising Mr. La Touche to represent him during his Absence.

Launceston and Deloraine Railway Offices, Launceston, 19th March, 1862.

MY DEAR SIR,

It is my intention to return to these Colonies after a short visit to England. In my absence Mr. Edmund Digges La Touche will represent me in all matters; he has had a long business training under some of the best English and Irish Engineers, and has obtained experience in works in those countries, and on the Continents of Europe and Africa. He has been for the last four years engaged on the most difficult portion of the Ceylon Railway; part of that time under me. I have received from all his former employers the highest testimonials of his competency as an Engineer, and to his conduct as a gentleman and man of honor. To these I wish to add my testimony in the strongest terms. * * *

Yours faithfully,

W. T. DOYNE.

H. DOWLING, Esq., M.H.A.

LETTER from the Agent of Messrs. Peto, Brassey, & Co. Sydney, on the Price paid to Mr. Doyne, for his Engineering work on the Launceston and Deloraine Railway.

Sydney, 31st May, 1862.

DEAR SIR,

I AM favoured with your letter of 16th instant. After a careful consideration of the work performed by Mr. Doyne, in the Survey of the proposed Line of Railway from Launceston to Deloraine, and looking at its highly finished and comprehensive character, I have no hesitation in recording my opinion, that his charge of £2500, or about £56 per mile, is not only fair and reasonable, but *unusually moderate*.

Indeed, I think you have been very fortunate in meeting with a gentleman in this hemisphere of the professional standing and ability of Mr. Doyne, who happened to be disengaged, and willing to take the Survey on such terms.

I am, dear Sir,

Yours faithfully,

W. C. SPILLER.

HENRY DOWLING, Esq.

A 6.

MEMORANDUM by the Promoters on the Estimate of W. Archer, Esq., (p. 28.)

16th September, 1862.

Mr. Archer gives an approximate estimate of Receipts, less the traffic to the Mersey, at only....	£38,070
But in this estimate Mr. Archer takes credit for only £3000 to arise from intermediate traffic, estimated by Mr. Doyne at £13,000, (see Doyne's Report, p. 7.) It may be safely taken at, say £15,000, or add to Mr. Archer's estimate.....	£12,000
	£50,070
Against Mr. Archer's estimated Expenditure of.....	£49,400

A 7.

Survey Office, 9th September, 1862

SIR,

IN compliance with your instruction, I have the honor to transmit, for the information of the Parliamentary Committee on the Deloraine Railway, the result of my levelling operations between the crossing of the Railway on the Evandale Road and Launceston, together with the field-book containing the notes taken on the ground.

The check levels commenced at a "Bench mark" on the Evandale road, entered on the section as being 647·33 feet above the datum line, and extended to the "Bench mark" on the tide guage at Launceston, which is 111·00 feet above the datum. The difference between these heights, according to Mr. Doyne's section, is 536·33 feet.

I am happy to be able to report that the relative height between the same points, as determined by my check levels, was 537·05 feet, making a difference of 0·73 feet with that of the Section. This is equivalent to about 8½ inches, and may be considered as conclusive, in establishing the accuracy of the Sections between Perth and Launceston.

I have the honor to be,
Sir,

Your very obedient Servant,

W. ALCOCK TULLY:

The Hon. the Colonial Treasurer.

A 8.

Launceston and Western Railway Engineer's Office,
Launceston, 15th September, 1862.

TO THE CHAIRMAN OF COMMITTEE OF THE
LAUNCESTON AND WESTERN RAILWAY. }

SIR,

I HAVE the honor to forward a reply to the following Question which I have been requested to answer:—

QUESTION.—What is to be the distance between the sleepers, and the number to the mile?

ANSWER.—The sleepers are to be 3 feet apart from centre to centre, and there will be consequently 1760 to the mile; this is the usual number on all Lines properly constructed.

I have the honor to be,
Sir,

Your obedient Servant,

E. D. LA TOUCHE.

A 9.

ON ITEMS OF MR. DOYNE'S ESTIMATE.

Launceston, 3rd September, 1862.

SIR,

I BEG to hand you my estimate of items 8, 9, and 10, page 11 of Mr. Doyne's Report on the Launceston and Western Railway:—

			£	s.	d.
No. 8.	6 feet culverts, per lineal yard, at.....		6	0	0
No. 9.	3 feet ditto ditto, at.....		2	10	0
No. 10.	1½ feet ditto ditto, at.....		1	0	0

These items are calculated at existing prices at the present time.

I am, Sir,
Your obedient Servant,

W. H. CLAYTON.

DR. BUTLER, Chairman, &c.

Will MR. GALE be good enough to fill up the Columns as far as No. 13, for the information of the Deloraine Railway Committee?

	£	s.	d.
1. 321,930 superficial yards soil removed from base of embankments and surface of cuttings, and placed by the fences, at.....	0	0	3
2. 3520 double chains of posts and rail fence, 4s. 6d. per rod, at.....	1	16	0
3. 496,561 cubic yards of excavation in clay, loam, marl, gravel, sand, &c., carried to form embankments, at.....	0	2	0
4. 127,930 cubic yards ditto, thrown to spoil, at.....	0	1	6
5. 26,029 cubic yards of rock cutting carried to form embankments, at.....	0	6	0
6. 140,409 cubic yards of side cutting to form embankments, at.....	0	1	4
7. 321,930 superficial yards laying soil upon slopes of cuttings and embankments, and sowing ditto with grass seeds, at.....	0	0	3
8. 93 lineal yards culvert, 6 feet diameter, at.....	8	10	0
9. 726 ditto ditto 3 feet ditto, at.....	3	10	0
10. 322 ditto ditto 1½ feet ditto, at.....	1	15	0
11. 144 ditto cast iron pipe, 12 inches diameter, under embankments, at.....	2	17	0
12. 7 turnpike road level crossings, at.....	100	0	0
13. 60 public road and occupation road level crossings, at.....	15	0	0

THE prices affixed to the items marked 2, 3, 5, and 6, are the same as those adopted by me in furnishing an estimate to the Promoters.

J. N. GALE.

Hobart Town, 19th September, 1862.

By W. R. FALCONER, Esq., Director of Public Works.

	£	s.	d.
1. 321,930 superficial yards soil removed from base of embankments and surface of cuttings, and placed by the fences, at 6d.	8048	0	0
2. 3520 double chains of post and rail fence, per double chain at 40s.	7040	0	0
3. 496,561 cubic yards of excavation in clay, loam, marl, gravel, sand, &c., carried to form embankments, at 2s.	62,449	0	0
4. 127,930 cubic yards ditto, thrown to spoil, at 2s.			
5. 26,029* cubic yards of rock cutting, carried to form embankments, at 4s. 6d.	5856	0	0
6. 140,409 cubic yards of side cutting to form embankments, at 2s.	14,040	0	0
7. 321,930 superficial yards laying soil upon slopes of cuttings and embankments, and sowing ditto with grass seeds, at 8d.	10,722	0	0
8. 93 lineal yards culvert, 6 feet diameter at 140s.	651	0	0
9. 726 ditto ditto 3 feet ditto at 60s.	2178	0	0
10. 322 ditto ditto 1½ feet ditto at 15s.	242	0	0
11. 144 ditto cast iron pipe, 12 inches diameter, under embankments, at 90s.	648	0	0
12. 7 turnpike road level crossings.			
13. 60 public road and occupation road level crossings.			

* Say rock about one half brown, and other half blue stone.

ANALYSIS of the Comparative Items of Estimate for Earth-works, and Culverts, by Mr. Clayton, Mr. Gale, Mr. Falconer, and Mr. Doyne.

DESCRIPTION OF WORK.	DOYNE.	CLAYTON.	GALE.	FALCONER.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Superficial yards, soil removed from base of embankments and surface of cuttings, and placed by the fences.	0 0 2	0 0 1½	0 0 3	0 0 6
Double chains of post and rail fence.	2 10 0	2 0 0	1 16 0	2 0 0
Cubic yards of excavation in clay, loam, marl, gravel, sand, &c., carried to form embankments.	0 2 0	0 2 6	0 2 0	0 2 0
Cubic yards ditto, thrown to spoil.	0 2 0	0 2 6	0 1 6	0 2 0
Cubic yards of rock cutting, carried to form embankments.	0 5 0	0 5 0	0 6 0	0 4 6
Cubic yards of side cutting to form embankments.	0 1 3	0 1 0	0 1 4	0 2 0
Superficial yards laying soil upon slopes of cuttings and embankments, and sowing ditto with grass seeds.	0 0 1	0 0 1½	0 0 3	0 0 8
Lineal yards culvert, 6 feet diameter.	10 0 0	6 0 0	8 10 0	7 0 0
Ditto, 3 feet diameter.	3 15 0	2 10 0	3 10 0	3 0 0
Ditto, 1½ feet diameter.	1 5 0	1 0 0	1 15 0	0 15 0

RETURNS RESPECTING CROWN LANDS IN THE PROPOSED RAILWAY DISTRICT.

TOTAL Quantity of Land sold in the Road Districts of Patterson's Plains, Breadalbane, Evandale, Longford, Carrick, Westbury, Exton, Upper Meander, Deloraine, Medhurst, and Chudleigh; also in the Suburbs of Launceston; during the Years 1860 and 1861.

ROAD DISTRICT.	AREA SOLD.			AMOUNT SOLD FOR.		
	A.	R.	P.	£	s.	d.
Patterson's Plains	—	—	—	—	—	—
Breadalbane	—	—	—	—	—	—
Evandale	—	—	—	—	—	—
Carrick	—	—	—	—	—	—
Deloraine	—	—	—	—	—	—
Longford	1213	2	29	2372	4	0
Westbury	2535	0	39	2899	2	0
Exton	1276	1	0	1801	11	0
Upper Meander	100	0	0	120	0	0
Midhurst	1768	0	18	4804	0	0
Chudleigh	3571	1	12	5423	11	4
Launceston Suburbs	244	2	2 ⁹ / ₁₀	1400	18	0
GRAND TOTAL	10,709	0	20 ⁹ / ₁₀	18,821	6	4

RETURN of the Area of Leased Lands in the under-mentioned Road Districts.

NAME OF DISTRICT.	AREA.		
	A.	R.	P.
Patterson's Plains.....	—	—	—
Breadalbane	—	—	—
Evandale	31,520	0	0
Longford	8,220	0	0
Westbury	1,800	0	0
Exton.....	15,200	0	0
Carrick	—	—	—
Upper Meander	10,370	0	0
Deloraine	—	—	—
Midhurst	16,680	0	0
Chudleigh	18,000	0	0
	101,790	0	0

RETURN of the AREA of VACANT CROWN LAND in the under-mentioned Road Districts.

NAME OF DISTRICT.	AREA.		
	A.	R.	P.
Patterson's Plains	—	—	—
Breadalbane	—	—	—
Evandale	58,480	0	0
Longford	12,780	0	0
Carrick.....	—	—	—
Westbury.....	27,200	0	0
Exton	23,800	0	0
Upper Meander	34,730	0	0
Deloraine	2	0	17
Midhurst	68,320	0	0
Chudleigh	144,500	0	0
	369,812	0	17

TOTAL AREA of CROWN LANDS in the Road Districts.

A. 471,602 R. 0 P. 17

J. E. CALDER,
16th September, 1862.

A 11.

RETURN of English, Scotch, and Irish RAILROADS, Number of Miles open in 1861, Cost per Mile, and Dividends paid, for the Year ended December, 1861.—(From the Economist, July 26, 1862.)

Name of Railway.	Miles open.	Cost per Mile.	Dividends.
		£	£ s. d.
Belfast and Northern Counties	136	7,719	4 10 0
Bristol and Exeter	125	39,162	4 12 6
Caledonian	219	41,596	5 5 0
Dublin and Drogheda	63	17,414	5 0 0
Dundee, Perth, and Aberdeen	31	24,725	1 0 0
East Anglian	68½	24,434	No return
Edinburgh, Perth, and Dundee	85	40,045	
East Counties—East Union—Norfolk	499	33,815	3 10 8
Edinburgh and Glasgow	160	26,833	4 5 0
Great Northern	230	40,686	5 15 0
Great Northern of Scotland	58	21,061	7 5 0
Great Southern and Western (Irish)	329	16,058	5 0 0
Great Western and Western Midland	943	41,252	2 12 6
Lancashire and Yorkshire and East Lancashire	395	49,072	5 5 0
London and North Western, &c.	1015	41,800	4 5 0
London and Blackwall	5½	353,068	3 2 6
London, Tilbury, and Southend	45	17,650	6 0 0
London, Brighton, and South Coast.....	234	42,357	6 0 0
London and South Western	394	31,541	4 15 0
London, Chatham, and Dover	56	37,760	No return
Manchester, Sheffield, and Lincolnshire	231	57,877	1 0 0
Midland	614	35,459	6 12 6
Midland Great Western (Irish)	192	16,217	5 0 0
Monklands	52	13,039	5 5 0
North British	199	24,910	3 0 0
North Eastern—Berwick, York, Leeds	764	36,183	5 13 0
North London	9	160,567	5 5 0
North Staffordshire.....	246	21,972	3 5 0
Scottish Central	53	35,000	6 2 6
Scottish North Eastern	132	26,549	1 0 0
South Eastern	306	46,083	4 11 8
South Devon	72	31,355	1 7 6
Stockton and Darlington	119	19,531	8 15 0
Taff Vale	54	26,446	8 10 0
Vale of Neath.....	36	29,479	3 5 0

Average of Dividend £4 3s. 10½d.

Thus showing that, notwithstanding the enormous cost of these Railways per mile (on which many of the Companies pay high rates of interest on preference shares and guarantees), a very fair average dividend is realized.

A 12.

ESTIMATE of INTEREST for 2½ Years during Construction, at 6 per cent., £374,000, borrowed at the Intervals stated.

During 1st 6 months	£25,000 ..	2½ years interest	£3750
2nd ditto	50,000 ..	2 ditto	6000
3rd ditto	100,000 ..	1½ ditto	9000
4th ditto	100,000 ..	1 ditto	6000
5th ditto	50,000 ..	½ ditto	1500
After opening	49,000 ..	—	—
	£374,000		£26,250

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STATEMENT of Deductions by Promoters from the Amended Estimates by MR. W. R. FALCONER, (A 2.)

Mr. Falconer's increased Estimate is.....	£	£
Deduct—	..	485,900
Preliminary Expenses, which have been paid by donations and Government contribution	3,080	
Sundries and Interest down at £44,000; £26,000 they believe will be sufficient (see Estimate)	18,000	
Additional Compensation for land, say £4400, and not £19,800	15,400	
New Wharf at Launceston Station. Unless this can be paid out of Contingencies, not to be built until wharfage will pay the interest	10,000	
Contingencies, being already provided in the sum of £15,000 and added to Mr. Doyne's very high items of estimate in the hands of the Committee of Promoters	44,172	
	<u> </u>	90,652
Total, less deductions		<u>£395,248</u>

ESTIMATE of probable Extra Cost of LAUNCESTON and WESTERN RAILWAY, made up of Items not included in the Report of MR. DOYNE.

The Estimate of Mr. Doyne is	£	£
And includes £10,000 for Contingencies.	..	364,351
The Promoters propose to add—		
Interest, at 6 per cent. on capital during construction, say $2\frac{1}{2}$ years	26,000	
Additional Compensation for land beyond Mr. Doyne's Estimate, say	4,400	
Extra for Contingencies, say	5,249	
	<u> </u>	35,649
Total of	<u>£400,000</u>

A 13.

APPROXIMATE Estimate of Number of PASSENGERS by Coaches arriving at and departing from Launceston, 12 Months ending 1st July, 1862.

* Page's Coaches	9151	
Mail for same period, say	4575	
	<u> </u>	13,726
* Hyrons' Longford Coach (see Mr. Dodery's Evidence).....	4368	
Taukard's, say one-third less	2912	
	<u> </u>	7,280
* Spearman's Coach to Deloraine	3580	
East's ditto	3500	
	<u> </u>	7,080
Evandale Coach, say	3,120
TOTAL.....	..	31,206
The practice in England for ascertaining probable Passenger Traffic is said to be to multiply these numbers by $3\frac{1}{2}$	<u>31</u>
And this gives a total for Passenger Traffic of	<u>109,221</u>

For the Committee of Promoters,

H. DOWLING, Vice-Chairman

* These only are made up from the Way-bills.

*Launceston and Western Railway,
Engineer's Department, Launceston, 22nd September, 1862.*

TO THE CHAIRMAN OF PARLIAMENTARY
COMMITTEE OF RAILWAYS, HOBART TOWN.

SIR,

I HAVE the honor herewith to enclose the details of my estimate of the probable working expenses of the Launceston and Western Railway. I should have forwarded them sooner, but that I thought it would be satisfactory to submit them, with questions thereon, to Mr. Elsdon, the Engineer-in-Chief of the Hobson's Bay Railway Company in Victoria, as any opinion coming from such a source cannot but have weight. I beg to call the attention of the Committee to the fact, that Mr. Elsdon considers the estimate in all its details ample, with the one exception of Porters, to which item he recommends an increase of six (laborers) and a Clerk. As I have assumed all labor (unskilled) to be paid at 6s. per day, and as labor will, in all probability, be procurable at a much lower rate when the Railway is finished, and at present can be obtained at 5s., I beg to submit that the saving that can be effected in that item will fully cover any extra hands that may be required, without even drawing on the very large margin for contingencies which Mr. Doyne's estimate affords. I beg most respectfully to hope that these details, questions to Mr. Elsdon, and his replies and letters, may be received as evidence, and appended to that already given by me. It will be seen that each page of Mr. Elsdon's replies to my questions are signed by him and witnessed by a Justice of Peace.

I have the honor to be,

Sir,

Your most obedient Servant,

E. D. LA TOUCHE.

LAUNCESTON AND WESTERN RAILWAY. ESTIMATE OF WORKING EXPENSES.

Five trains per day, two up, two down, and one half-way and back.
Steepest gradient 1 in 70.
Length of Line 44 miles.
Working days in year, 313.
Train miles per day, 220.
Ditto per year, 68,860:

Estimated Traffic—Goods, 27,000 tons.
Cattle, 4500 head.
Sheep, 26,000 head.
Passengers, 115,000.

Rolling Stock in daily use:—2 engines 88 miles each.
1 ditto 44, and shunting if required.
3 first class carriages.. £1500
3 second ditto..... 1050
3 guard vans..... 900
20 waggons..... 2600
2 horseboxes..... 500

£6550

	£	s.	d.	Per Train Mile.
Fuel—30 lbs. of coal 1 train mile, at £2 4s. 6d. a ton	—	—	—	7·072
Oil waste and tallow.....	—	—	—	1·895
Firewood	—	—	—	0·409
Four engine drivers at 14s.....	—	—	—	3·055
Three firemen at 8s.....	—	—	—	1·308
One cleaner and fire lighter at each terminus.....	—	—	—	0·655
Watering, three men pumping, at 6s.....	—	—	—	0·982
Labor on coal, two men screening, at 6s.....	—	—	—	0·655
Sundries and contingencies.....	—	—	—	0·355
Total running expenses	—	—	—	<u>16·386</u>
Locomotive repairs—Three engines in daily at £250 per annum each. Total £750 per annum	—	—	—	2·614
Carriage ditto—10 per cent. on £6550, the value of the stock in daily use, £655 per annum	—	—	—	2·282
Guards—3 daily, at 8s. each.....	—	—	—	1·309
Materials, £50	—	—	—	0·174
Station Masters and Porters—1 Station Master at Launceston.....	250	0	0	
1 ditto, Deloraine	200	0	0	
8 intermediate, at £120.....	960	0	0	
2 head Porters, at £100.....	200	0	0	
8 ditto, at £80.....	640	0	0	
4 Boys, at £30.....	120	0	0	
Material and contingencies.....	88	0	0	
Per annum	2458	0	0	

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	£	s.	d.	Per Train Mile. d.
Per train mile	—	—	—	8·566
Maintenance of Line—11 gaugers at 8s.	3443	0	0	}
22 laborers at 6s.				
200 yards of ballast, per mile, per annum.....				
Repairs of Stations	1100	0	0	
	706	0	0	
Per annum	5249	0	0	
Per train mile	—	—	—	18·292
Police and Gatekeepers—14 at 6s., and } material.....	1491	0	0	}
1 Resident Engineer.....				
1 Draughtsman				
1 Engine and Carriage Foreman				
1 Secretary				
1 Accountant				
3 Clerks, at £100.....				
1 Storekeeper				
1 Assistant				
Lighting, stationery, sundries				
Per annum	4258	0	0	14·838
Total cost of working per train mile.....	—	—	—	69·675

SUMMARY.

	£	s.	d.	Per Annum.	Per Train Mile. d.
Running expenses	6541	13	2	22·765	
Station Masters and Porters.....	2458	0	0	8·566	
Maintenance of Line	5249	0	0	18·292	
Police and Gatekeepers.....	1491	0	0	5·214	
Engineering, Secretary, stores, sundries, &c.....	4258	0	0	14·838	
	£19,997	13	2	69·675	
Total working expenses.....	£20,000	0	0		
Renewals and contingencies	6,000	0	0		
See Mr. Doyne's Report.....	£26,000	0	0		

Melbourne and Hobson's Bay Railway Company,
Engineers' Office, Sandridge, 15th September, 1862.

SIR,

ACCOMPANYING this letter you will find my answers to the various questions proposed by you in connection with your estimate for Stations, providing the necessary plant, and working the Launceston and Western or Deloraine Railway. They enter so much into detail that any further remarks on my part are unnecessary.

I may, however, observe generally that the estimate for the locomotives and rolling stock appears to be a fair one for the traffic calculated on, but will require to be increased as the traffic is developed. You have not stated the size or class of engines you propose. I presume them to be 14, cylinder coupled, which will be found sufficiently powerful for the gradient you mention,—viz., 1 in 76.

I may state that our last new carriage and guard vans have been built for the same prices as estimated by you, viz. English prices, by Mr. Williams of Melbourne, who also builds for the Government lines. They have now been running on our lines for some time, and have given me every satisfaction.

With regard to the working expenses, the items "Maintenance of Way" and "Direction and General Charges" appear to be extra liberal; but the proportion may be expected to decrease rapidly as the mileage run increases.

The number of porters proposed in the estimate for running expenses can, I think, with great advantage, be increased by (say) 6 hands (laborers) at least, when the traffic shall have been developed to the extent calculated on.

The sums set down for the different stations will, in my opinion, be found quite sufficient, as I entirely disapprove of any injudicious outlay in this item beyond what is absolutely required.

I have the honor to be,

Sir,

Your obedient Servant,

WILLIAM ELSDON, C.E.

E. D. LA TOUCHE, Esq.

*Melbourne and Hobson's Bay Railway Company, Engineer Office,
Sandridge, 15th September, 1862.*

LAUNCESTON AND WESTERN RAILWAY.

ANSWERS to Mr. LA TOUCHE'S Queries, as Evidence for the Committee on the Launceston and Western Railway.

1. Have you examined carefully the details of working Expenses sent to you? I have.
2. Do you consider the rolling stock in daily use sufficient to carry the estimated traffic? Ample; as I consider that for a new undertaking, with new Stock, it is not necessary to make so liberal an allowance as has been done for repairs, &c. in shed.
3. Is the sum put down for their value sufficient? Quite sufficient.
4. Is 88 miles over or under the work usually performed by an Engine? As this is for every alternate day, it is under.
5. How many miles do the Engines run daily on your lines? Our locomotives run 194 miles every alternate day.
6. Do you consider £250 per Engine per annum sufficient for the repairs of an Engine running only 88 miles? Ample.
7. Do you consider that an Engine running such a short distance, and kept in repair, would have a longer or shorter life than 10 years? With proper care and management, I would reckon on a much longer life.
8. Will the same hold good as regards carriages and waggons? Certainly.
9. What machinery have you in your present workshop; and what is the cost of *each* machine? Double wheel lathe about £650, screw-cutting lathe £300, planing £355, drilling £170, screwing £67, shaping £70; as also foot lathe £12, and boring bar for locomotive cylinders £42; the whole driven by a 12 cylinder engine £500. Attached to the Works are a tyre furnace with proper bending machine £378.
10. What would be the cost of a workshop in Melbourne sufficient to hold the machinery you mention, including forges and bellows, engine pits, &c., steam engine and boiler house? If built of hard wood and corrugated iron, about £3000 at present prices.
11. Would not a weather-board construction with galvanized iron roof be adequate to the purpose? Yes; but I would recommend the advisability of having a detached building of iron for the forges.
12. Then, in a country where timber abounds, the cost would be less than at Melbourne? Yes.
13. For what number of train miles is your workshop sufficient? One train mile amounts to about 160,000.
14. Do you repair for other Companies besides your own? Yes.
15. How many smiths, fitters, and workmen are employed in your shops? 2 fitters, 1 foreman, 3 apprentices, 2 smiths and strikers, 2 carriage repairers, 1 wagon repairer, 3 carpenters, and 2 laborers; the majority of our drivers, being fitters, execute any small repairs on their own engine when in shed.
16. What was the cost of the St. Kilda Station including sheds and platform? About £6500; but this was at a time when prices were high.
17. Of what is that Station constructed? Brick, with corrugated iron sheds.
18. Would not such a Station be unnecessarily expensive for a country terminus where the traffic will be comparatively small as compared to that on your line? Certainly.
19. Have you examined Mr. Doyne's Report? Yes.

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20. You have seen the sums put down for the different Stations in that Report, viz.—Launceston £12,000, including workshop; Deloraine £3400; and intermediate, £5600; do you consider those sums sufficient, it being expressly understood that there will be a total absence of ornament and cut stone, and that all intermediate Stations will be weather-board constructions? I consider the estimate liberal.

21. State the cost of the proposed new terminus at Melbourne, and the accommodation it will afford? About £6000. The accommodation proposed consists of a large Waiting Hall, with two Booking Offices, and Station Master's Office, a large Refreshment Room, Ladies' Waiting Room, Board Room, Secretary's, Accountant's, Clerks', (2) Engineer's, Rooms, and four apartments for Station Master, with proper Offices attached.

22. State the cost of some of your intermediate stations? Emerald Hill £3000, Raglan-street £600, including platform.

23. Do you consider the staff put down for Secretary, Engineering, and traffic management sufficient for the traffic assumed? Quite sufficient.

24. Is it below, above, or equal that at present in force on your line? Rather above the proportion adopted on our lines.

25. How many tons of goods and how many passengers do you carry yearly on your line? About 166,000 tons of goods and 2,000,000 passengers, besides 8000 free passes, (to parties connected with the shipping, &c.) It is to be understood that the monthly ticket-holders, who constitute a large proportion of the 2,000,000, are set down as taking only one trip each way per diem—a calculation far below what is really the case.

26. How many porters do you find requisite at Melbourne, and how many of these are employed in unloading goods from the waggons? There are eight porters and one head porter solely for the passenger traffic at Melbourne terminus, and about an average number of 53 laborers and 20 goods clerks employed at Melbourne in unloading goods inwards and loading outwards goods; the latter of which bears a very small proportion to the former. The proportion of goods clerks is large, but this is necessary for the proper checking of the receipt and delivery of goods from trucks and drays.

27. What amount of goods can this number of porters unload in a day? About an average of 530 tons. It should, however, be remarked, in answering the last two questions, that there is another staff of men and clerks (43 laborers and 13 goods clerks) at Sandridge employed in forming trains and taking delivery from vessels in conjunction with the stevedore men, the latter being paid by the ships. The large proportion of goods clerks at Melbourne is required for the proper checking of the goods, so as to prevent unfounded claims for damages, &c. There are 10 porters set down in the estimate for "running expenses," even on the supposition that the Station Masters are unassisted at the eight intermediate Stations. As at least two of these porters would be required occasionally for the passenger traffic at each terminus, in cleaning carriages, platforms, station houses, and attending to the passengers, the five at each terminus would not be adequate to the proper working of the goods traffic, at least when developed to the extent reckoned on; viz., 86 tons of goods and 100 head of cattle per day. I would propose 7 hands (including passenger porters) with a goods clerk as being necessary.

28. Is 30 lbs. of coal per mile above or below the usual average? About the usual average, somewhat above our consumption of Newcastle N. S. W. coals.

29. Compare the price assumed for coal, namely £2 4s. 6d., and the price paid on your line? About equal.

30. How many men per mile do you employ in maintaining the Line? 2 per mile; but the traffic and number of trains are far beyond the usual average.

31. Is your Line single or double? Double.

32. How many trains run over it daily? 44 on the Sandridge Line, composed of passengers and goods; and 64 on the St. Kilda Line, which are composed of both Brighton and St. Kilda carriages, as the traffic of the Brighton Line passes over ours.

33. Will that increase the cost of maintenance? The cost of maintenance will generally be proportionate to the number of trains and amount of traffic passing over the Line.

34. On a single Line over which 5 trains will only pass daily, and when there are but few large embankments, will 3 men to every 4 miles be sufficient? The number of men proposed will be quite sufficient after the first year; this is on the presumption that the permanent way is of a good description and well constructed.

35. You see in the estimate that unskilled labor is put down at 6s. per day; supposing that labor can be procured at 5s., what saving do you find would be effected; and what additional number of men would this sum allow to be employed? A sixth; four and one-half men additional.

36. Do you then consider that there is a margin for contingencies in the item "maintenance?" Yes, quite so.

37. Will you state the salaries of the following Officers on your Line:—Engineer, Secretary, Accountants, Clerks, Station-Masters, Porters, Platelayers, Engine Drivers, Laborers, Policemen, Gate-keepers, and all employees? Accountant £350, Clerk £250, Storekeeper £260 per annum, Station Masters from £350 down to £100 with quarters, Head Porters 8s. to 9s. per day, ordinary Porters 6s. per day, Assistant Storekeeper 6s. per day, Platelayers 9s. to 7s. per day, Laborers to Platelayers 6s., Police 6s., general Laborers 6s., Watchmen and Cleaners 7s. per day, Engine Drivers 15s. to 12s. per day, Stokers 10s. to 9s. per day, Gatekeepers 7s. to 4s. 6d. per day with quarters, Piermaster £350 per annum.

38. Would the wear and tear of machinery and permanent way be increased by the introduction of 4 miles, of 1 in 40? Yes; very materially.

39. Where light Engines are used, calculated to run 20 miles an hour up 1 in 70, and carrying a gross load of 100 tons, would the same Engines be available for 1 in 40, even by decreasing the speed, without employing pilot Engines? I should think not; but in order to answer the question with exactness, I should be provided with a description of the size and class of Engine, together with a section and plan of the Line. However, I may state generally, that the adoption of such stiff gradients is highly objectionable, and will be always found to be unsatisfactory, and to entail heavy expenses in working.

40. Then you consider the introduction of such gradient as 1 in 40 would increase the working expenses? Yes.

41. Do you consider it of advantage to have your workshops, goods, sheds and passenger Station in the same locality; and will not a saving be effected thereby in management? Certainly; if such can be accomplished without incurring immoderate expense.

42. How long on an average do goods lie in your Stores before they are removed by the merchants, and what charge do you make for storage? The time is very uncertain; it sometimes amounts to one fortnight or 3 weeks, but the great weight of goods is removed within 24 hours of delivery. No charge is made; but occasionally when room is required, to enforce removal, goods are carted away and stored in private Stores at consignee's expense.

WILLIAM ELSDON, C.E.

Witness—C. M. INGLES, J.P.

A. 15.

Colonial Treasury, 13th May, 1862.

SIR,

I HAVE the honor to transmit to the Northern Sub-Board of Works the enclosed letter of the Honorary Secretary of the Launceston and Deloraine Railway Committee, of date the 12th April, on the subject of the Railway Bill proposed to be introduced in the next Session of Parliament; also, the Report on the projected Railway by W. T. Doyne, M.I.C.E., addressed to the promoters of that undertaking; and, in doing so, I have to request that the Board will afford for the information of the Government a full and detailed Report on the Estimates of Mr. Doyne, as set forth in his Report, on the mode and cost of constructing the Railway,—the traffic which will be carried upon it,—the expenses of working it,—as well as on such other questions as may occur to the Board, or may be suggested to it from time to time by the Executive, having reference to the expediency of the guarantee required from the Government being conceded.

The Board in its Report to set forth the conclusions on which the Members are unanimous, and those on which there is a difference of opinion among them; with the names of the Members on respective sides, on questions in which they have not been unanimous.

The Report of the Board, if so desired by it, to be a confidential communication to the Government, and to be furnished by the 15th proximo.

I have the honor to be,
Sir,

Your very obedient Servant,

F. M. INNES.

R. C. GUNN, Esq., Chairman, Northern Sub-Board of Works.

Launceston, 16th June, 1862.

SIR,

WE have the honor to acknowledge receipt of your letter of the 13th ultimo, with its various enclosures, relating to the proposed Launceston and Deloraine Railway, requesting the Northern Sub-Board of Works "to afford for the information of the Government a full and detailed Report on the estimates of Mr. Doyne, as set forth in his Report, on the mode and cost of constructing the Railway,—the traffic which will be carried upon it,—the expense of working it,—as well as on such other questions as may occur to the Board, or may be suggested to it from time to time by the Executive, having reference to the expediency of the guarantee required from the Government being conceded."

Having given the whole subject the fullest and most careful consideration, we beg to subjoin the conclusions at which we have unanimously arrived, attaching in separate memoranda the views of the Members on various points respecting which the Board collectively were not in a position to offer an opinion.

We are not prepared to question the general accuracy of the estimates of Mr. Doyne, as set forth in his Report, on the mode and cost of constructing the Railway, except as to "Item 2. Land and compensation," (page 7), which we conceive to be greatly understated. Nor have we had the means of satisfactorily testing the accuracy of the Traffic Returns, (page 10).

With reference to the Draft Railway Bill, we are of opinion that the proposed Railway District (clause 2) requires to be entirely redefined, as it includes a number of the present Road Districts, without in any way referring to those portions that cannot derive any advantage from, or have the slightest interest in, the Railway—such as property near Ben Lomond, Ben Nevis, Ringarooma, Mount Direction, &c.

That the provision (under Clause 32) against accidents and interruption to traffic at the level crossings (stated to be 60 in number) is insufficient.

That, for the reasons given hereafter, the Government would not be justified in raising the sum of £400,000 (Clause 40), secured on the General Revenue of the Colony, for the construction of this work.

That the landholders of each separate Road District proposed to be affected by "the Railway Rate" (Clause 50), should formally and deliberately assent to the terms of any reguarantee; and that any assessment required to make up such reguarantee to the Government should be borne principally by Launceston, and in an increasing ratio towards the terminus of the Railway at Deloraine, as the most distant districts would derive the greatest advantages.

And we would also beg to direct special attention to Clauses 11, 19, 31, 32, 33, 44, 49, 50, 67, and 71, as requiring revision.

We consider that the advantages conferred by Railways upon the districts which they traverse can scarcely be over-rated; and that the facilities for inter-communication and transit of produce afforded by the proposed line to the Districts of Launceston, Evandale, Longford, Westbury, and Deloraine, will considerably enhance the value of land in their immediate neighbourhood. We conceive also that it is the duty of Government to encourage attempts which are made with the view of developing the resources of the country. But as the benefits which will be conferred by this Railway will be of a purely local character, and the area of crown land likely to be affected by it is very limited in extent, and consists almost entirely of land which is worthless for purposes of cultivation, we think that the districts affected by it should participate in its liabilities equally with its advantages; and that in furthering the construction of the Railway Government should be carefully protected from all risk.

We are of opinion that any assistance or guarantee to the Launceston and Deloraine Railway should be in such a form as not to interfere with any annual grant for the opening up of the Crown Lands of the Colony, whether by roads or tramways; and that any guarantee or reguarantee should be so accorded as not to prevent the Government from giving the like guarantee or re-guarantee to any Town or District requiring Railways or other public works.

With this view it is most desirable that a definite system of guarantees and reguarantees for Railways and other public works should be determined upon by the Government; and we recommend that the Launceston and Deloraine Railway should be assisted under whatever general regulations may be thus instituted.

We annex various documents bearing upon the subject, to which we beg to refer.

We have the honor to be,
Sir,

Your most obedient Servants,

RONALD C. GUNN.

W. R. FALCONER.

JAMES SCOTT.

T. STEPHENS.

The Hon. F. M. INNES, Colonial Treasurer, Hobart Town.

NOTE.—The Railway Bill referred to in the above Report is the printed *first* Draft copy.

MEMO.

THAT, by the figures in the Railway Report (page 15), it appears the expenditure is estimated at £26,000, which, with £24,000 for interest, would make the annual expenditure £50,000. The revenue is estimated (page 10) at £30,240, thus leaving an annual deficiency of £19,760. £13,000 is added to the revenue (page 11.) This, however, would still leave £6760 per annum to be provided for. It is estimated (page 14) that a gross total revenue of £70,000 per annum will be realised shortly after the opening of the Railway. But no *Colonial* data, or even figures, are given to show how this conclusion has or can be arrived at.

The charges for transport of goods or produce, as per Railway Report (page 10), are at rates unlikely to be exacted if the Railway were in operation. And in place of being a uniform charge of "less than half the present cost of cartage on the turnpike road," they are fully equal to seven-eighths of the present rates of cartage between Deloraine and Launceston (see Note). And as the cost of cartage between Deloraine and Launceston may be expected to be reduced as the road is improved, &c., it is evident that, to make the Railway of any benefit to the agriculturist, produce should be carried by it at a uniform charge not exceeding 3*d.* per ton per mile, and the estimate of Railway revenue should be prepared by taking that amount as the maximum rate.

In granting reguarantees of large amount, it is most desirable that every precaution should be taken to prevent these reguarantees being given to Towns or Districts to such an extent as might cause any of them difficulty in meeting the payment of interest, or in fulfilling any of their other engagements.

A few years since the Government of Canada suffered severely by the granting of large reguarantees to Municipalities on account of Railways. These Municipalities found it impossible to meet their engagements, or to assist and collect the rates. In consequence, the Government were obliged to take upon themselves all the Railway liabilities of the Municipalities; and these were of so extensive a character that, to meet the annual interest upon them, the *Ad Valorem* duties of the Colony had to be increased five and ten per cent. (say from 12½ to 22½ per cent.)

W. R. FALCONER.

16th June, 1862.

Note.—The estimated charge for transport of produce by the Railway (page 10) is 6*d.* per ton per mile, or from Deloraine to Launceston (44 miles) would be 22*s.* per ton.

By Act 21 Vict. No. 6 the ton of flour or grain is fixed at 2000 lbs.; and the present price for cartage of wheat from Deloraine to Launceston is 8*d.* per bushel, or 22*s.* per ton, therefore the same as is proposed by Railway. If the ton is taken at 2240 lbs, the present rate of cartage from Deloraine to Launceston of wheat would be 25*s.* per ton.

W. R. F.

MEMO.

ADMITTING that the direct route from Launceston to Deloraine is objectionable, on account of its engineering difficulties and the expense consequent thereon, we are of opinion that the excessively circuitous line which is recommended would but partially meet the requirements of the Western Country; and that the competition of ordinary land carriage with such a line of Railway would very materially interfere with the realisation of the revenue which is anticipated from it.

As the Port of the Mersey is distant only about 28 miles from Deloraine, and proportionably nearer to the districts lying beyond it, it is reasonable to expect that most of their produce will, at no distant period, find an outlet in that direction, and that thus the traffic from the Westward to Launceston will be considerably diminished.

RONALD C. GUNN.

JAMES SCOTT.

T. STEPHENS.

Launceston, 16th June, 1862.

MEMO.

WE are of opinion that much of what is enumerated in the Return of Traffic (Doynes Report, page 10) as passing through the toll-bars, and taken as the basis upon which the revenue is calculated, would not at any time be conveyed by Railway; also, that the tariff of charges is much too high. Many of the articles do not require rapidity so much as cheapness of transit.

We think that, before the Government agreed to any guarantee whatever, it should ascertain and be satisfied that the rights and interests of every individual likely to be affected by this Railway had been duly protected; such as where streets and reserved streets, roads, &c., would be interfered with, and the ordinary traffic obstructed.

RONALD C. GUNN.

JAMES SCOTT.

AGREEING in the main with Mr. Doyne's estimate of the advantages resulting from the construction of Railways, I feel compelled to protest against the comparison drawn by that gentleman (Report, p. 12-14) between Ireland and Northern Tasmania, believing that his remarks are likely to lead uninformed persons into most erroneous conclusions. The statements made by the Royal Commissioners had reference to a period of unexampled poverty and general depression, when Railways were unthought of and impossible. Mainly through the operation of the Incumbered Estates Act, aided by the Land Improvement and Poor Law Acts, the condition of agriculture in Ireland had advanced to such an extent that it will now, as a whole, bear comparison with the most flourishing districts of England. In 1841 the live stock of Ireland was valued at £19,400,000: in 1855 it had reached, at the same rates, *thirty-three millions and a half*. The fallacy lies in the attributing to the Irish Railways that prosperity of which they have been but the natural and inevitable consequences.

T. STEPHENS.

MEMO.

IN the evidence of H. Dowling, Esq., in August, 1860, before the Parliamentary Committee, the area of Crown Lands to be affected by the Railway is given as 80,000 acres. It is my firm belief that the amount of Crown Lands available for occupation does not exceed 3000 to 5000 acres, within an average distance extending five miles on each side of the Railway.

He also states that 1,449,000 acres are in the Police Districts of Westbury, Morven, Longford, and Launceston; that quantity represents a square of upwards of $47\frac{1}{2}$ miles each side, or $2264\frac{1}{8}$ square miles, an area far in excess of what I estimate will be affected by the proposed Railway, (see my letter of 13th August, 1860, giving only 184,320 acres); such a diminution will materially alter the estimates for traffic, and render my calculations on such a basis most enormous.

The conclusions drawn by Mr. Doyne in his Report, page 15, taken at his own figures, show an annual loss of about £12,000; whilst the data he proceeds upon, if erroneous, which is possible, as figures are most fallacious to calculate upon, the yearly loss might greatly exceed that.

That it would be reasonable to expect a large per-centage, in addition to the estimates by Mr. Doyne, after the opening of the Railway, to repair and keep the Line in working order, thereby raising the amount much above the present estimates.

That a small traffic would require a high rate per mile; whilst a large traffic, at about half the price, would pay; whereas, by the estimates before me, the small traffic with high charges would be the probable rule for this line, thereby defeating itself.

That no provision is made by the Bill (in the event of the Railway not being completed for the specified sum) to raise an additional amount beyond the £400,000, by which the line might be left only partially completed; neither is provision made to pay off the principal sum, nor, in case the Railway should not be worked after spending the money, that all interest should cease.

Also that the guarantee by the Government and Districts, if given, should cease at the same time when the Railway is supposed to be self-supporting, which would tend to a careful supervision of the same by the projectors or shareholders, otherwise the most reckless, negligent, and ruinous system might be pursued.

JAMES SCOTT, *Surveyor*.

Launceston, 16th June, 1862.

P.S.—Mr. William Bonnilly informs me that he can cart his wheat into Launceston at a cost of 6d. per bushel (16s. 8d. per ton) from his farm, six miles beyond Deloraine, and if the roads were good he could it for less.

J.S.

A 16.

MEMORANDUM of Agreement made and entered into this Third day of April, One thousand eight hundred and sixty-one, between WILLIAM THOMAS DOYNE, of Launceston, in Tasmania, Civil Engineer, of the first part, and
Members of the Launceston and Deloraine Railway Survey Committee, of the second part.

WHEREBY, in consideration of the sum of Two hundred Pounds paid to the said William Thomas Doyne on the execution hereof, the receipt whereof is hereby acknowledged, and for the other consideration hereinafter mentioned, the said William Thomas Doyne agrees with the parties hereto of the second part and with each of them in manner following; that is to say,—That he the said William Thomas Doyne will completely examine, by instruments, that part of the

Island of Tasmania aforesaid over which the said parties hereto, of the second part, propose that the line of the said Railway shall be carried; and also will furnish to the said parties hereto, of the second part, an accurate survey and section of the route finally decided upon; and also a report containing full and reliable information and recommendation upon all the engineering points involved in the construction of the said Railway, and estimates of the quantities and cost of each particular work, compiled and arranged in such a manner as to provide satisfactory data upon which contractors can base their tenders, and so as to afford, with the exception of extended land plans and books of reference, as complete information as that required by the Standing Orders of the Houses of Parliament of Great Britain and Ireland, on applications for powers to take possession of land for Railway purposes: And the said William Thomas Doyne further agrees with the said parties hereto of the second part, and with each of them, to send in to Henry Dowling, or other the Chairman for the time being of the said Committee, the said Report on the first day of May next; and, in consideration of the aforesaid agreement on the part of the said William Thomas Doyne, the said parties hereto of the second part do, and each of them doth, hereby agree with the said William Thomas Doyne to pay to him the further sum of One thousand eight hundred Pounds, in and by six equal monthly instalments of Three hundred Pounds each; the first of such instalments to become payable on the first day of July next, and each of the remaining five instalments on the first day of each succeeding month; and the further sum of Five hundred Pounds on the delivery of the said report, plans, and drawings to the Chairman for the time being of the said Committee: And it is hereby agreed and declared that, if any doubt, difference, or dispute shall at any time arise between the said parties touching the construction of these presents, or any clause, matter, or thing herein contained or in anywise relating thereto, and such doubt, question, or difference shall not be fully decided between them within one calendar month after the same shall arise, then, and as often as the same shall happen, such case or matter shall be referred to the arbitration of two indifferent persons, to be chosen by the said parties, their executors or administrators, or of an umpire, to be appointed by the two nominees, the award of which said arbitrators or umpire shall be final, conclusive, and binding on the parties between whom such question shall arise: Provided always, that in case of any such doubt, difference, or dispute with regard to the character of the plans and sections intended to be provided under this agreement, the said arbitrators or umpire shall be guided in making their or his award by a reference to the plans and sections for similar purposes described in the Standing Orders of the Houses of Parliament of Great Britain and Ireland; and in case either of the said parties, his or their executors or administrators, shall refuse or neglect to appoint or name such arbitrators for the space of ten days after having been required so to do, it shall be lawful for the referee of the party so requiring the nomination to appoint another arbitrator, and their decision or award shall be as binding on the said parties to these presents, their respective executors or administrators, as the award of such two arbitrators or their umpire would have been if they had been regularly chosen; and further, it is agreed that such submission and reference shall from time to time be made a Rule of the Supreme Court of Tasmania. In witness whereof the said parties to these presents have hereunto set their hands, the day and year first above written.

A 17.

Launceston and Western Railway Engineer's Office, 22nd September, 1862.

SIR,

I AM desirous that no misunderstanding shall exist on the minds of your Committee on the Railway as to the extent of my responsibility as Mr. Doyne's representative in this Colony. I beg to say that I pledge my professional reputation to the items of Estimate of Cost of Construction given by Mr. Doyne, and to his Estimate of Working Expenses, and on every question of an engineering character comprised in his Report, and accept this responsibility not only as Mr. Doyne's representative, but personally, as I entirely coincide with him. I am further of opinion that his calculations respecting traffic are perfectly correct, and will be found practically below rather than above the actual results. I may add, in explanation of the evidence I have given respecting my responsibility before your Committee, that I had in view at that time the *relative personal* responsibility of Mr. Doyne and myself to the *promoters* were he present, and was not aware that the construction would be put on my evidence which I am informed has been,—namely, that, as Mr. Doyne's representative, I refuse to be responsible for his Report and acts. I have the honor most respectfully to request that this letter may be appended to my evidence, as I am quite prepared to pledge my professional reputation to the accuracy of the Report, and accept the responsibility, both as Mr. Doyne's representative and personally.

I have the honor to be,

Sir,

Your most obedient Servant,

E. D. LA TOUCHE.

HENRY BUTLER, *Esq., Hon. the Chairman of Railway Committee of Parliament at Hobart Town.*

A 18.

ABSTRACT of Prices for Earthworks and Culverts from MR. DOYNE'S Items of Estimate.

	£	s.	d.
Superficial yards soil removed from base of embankments and surface of cuttings, and placed by the fences	0	0	2
Double chains of post and rail fence	2	10	0
Cubic yards of excavation in clay, loam, marl, gravel, sand, &c., carried to form embankments	0	2	0
Cubic yards, ditto, thrown to spoil	0	2	0
Cubic yards rock cutting, carried to form embankments	0	5	0
Cubic yards side cutting, to form embankments	0	1	3
Superficial yards laying soil on slopes of cuttings and embankments, and sowing ditto with grass seeds ..	0	0	1
Lineal yards culvert, 6 feet	10	0	0
Ditto, 3 feet	3	15	0
Ditto, 1½ feet	1	5	0

I certify that the above is a true copy of the several prices affixed to the copy of the Report signed by W. T. Doyne.

HENRY BUTLER.

QUESTIONS from the Select Committee to WM. MOORE, Esq.

1. Have you examined the Plans and Sections provided for the Deloraine and Launceston Railway by Mr. Doyne? I have.

2. What is your opinion of the Line of Country through which it is proposed the Line of Railway shall pass? It would be difficult to find a Line of Country with fewer natural difficulties, or more favorable for the purposes of a Railway.

3. Are you acquainted with the Country itself? I have a pretty good local knowledge of the Country.

4. Have you not some knowledge of the principles of construction of Railways generally, in America and England? I have made it my study to become theoretically acquainted with the constructive principles of Railway Engineering. I am practically acquainted with the locomotive and steam engine. I have seen several English Railways; and, during ten or eleven years' residence in Canada and the United States, I had an opportunity of observing the progress and development of the American system.

5. What is your opinion of Mr. Doyne's Report in respect to the construction and working of this Railway? I feel satisfied that Mr. Doyne's Estimate as to cost of construction will be ample, and will more than cover any contingency. I am also of opinion that his Estimate of Working Expenses is sufficient, if not in excess.

6. Do you think that a Tramway would supply the wants of the agricultural and pastoral Colonists of the Western Country? I do not think that a wooden Tramway would answer such a purpose; if laid down with an iron rail it would become expensive; and therefore I think it would be advisable to construct a Railway.

7. You can, perhaps, state to the Committee some general opinions you entertain on the subject of the adaptation of Tramways to such a District as that comprised in Mr. Doyne's Report? I am not in favour of Tramways where easy gradients can be obtained; it would be contrary to all past experience. The locomotive has superseded the horse-tramway in almost every case in England and America. The cost of the transit of goods by rail by locomotive is much less than by horse-tramway.

8. Do you consider the gradients and curves adopted by Mr. Doyne as sufficiently easy for the economical working of the Railway? I do; and for that reason I think that Mr. Doyne has, perhaps, over-estimated the expenses of wear and tear.

9. Do you consider that gradients of 1 in 40, and curves of 15 chains, could be adopted successfully in the District referred to? Inclines of 1 in 40 may probably be worked by a locomotive, built expressly for the purpose; but inclines of 1 in 40 on a curve of 15 chains radius would be very objectionable, if not quite impracticable, and would increase the working expenses of the road to a very great extent. All practical engineers are well acquainted with the difficulty of ascending steep gradients; if the rails are wet, or covered with a little frost, the difficulty increases; in any case it requires powerful engines, with 4 or 6 wheels coupled.

10. Have you heard of what is called a direct line suggested, from Cimitiere-street, in Launceston, running round the Windmill Hill, and passing at the back of Mr. Cleveland's residence? I have.

11. Do you consider such a line at all practicable for the purposes of the Districts named? I am in favour of Mr. Doyne's line. I think it embraces a greater extent of Country, both in population and agriculture, and therefore I think a greater income to the Railway would be derivable from Mr. Doyne's line than from the so-called straight line. I think a Railway should pass as near as possible through the centres of population.

12. What is your general opinion of the commercial value of the proposed line, looking to the centres of population it includes or touches? I am of opinion that the Railway would not, commercially speaking, pay for the first two or three years; but the benefits which would accrue to the Municipality of Launceston, the Country, and the Government, would more than compensate for any deficiency which it might be necessary to raise by assessment. My reasons are—1st. That our people are not accustomed to Railway travelling. 2nd. That our farmers have their waggons, and the various appliances for conveying their own produce to market, and it is not likely that they would patronise the Railway all at once.

13. What is your opinion of the comparative advantages and expense (if any) of a Railway, such as that proposed, over a Tramway? It would be difficult to draw even an approximate comparison of the relative advantages of rail by locomotive and the ordinary horse-tramway in a commer-

cial point of view, as all would depend on the extent of the traffic in goods and passengers; but if we were to consider both the Rail and the Tram fully employed, we would arrive at the following result; viz.—a Railway fully employed would pay a good dividend to the shareholders, at from 1*d.* to 1½*d.* per ton per mile. Mr. Tully has estimated the cost of transit by horse-tramway, fully employed, at 1*s.* per ton one way, or 6*d.* per ton per mile; but it must not be lost sight of that a Railway requires a certain amount of traffic to pay even the interest on so large a capital.

14. Have you any general remarks to make, which will afford information to the Committee, on the subject of the proposed Railway, with reference to your personal experience on the subject of locomotive Railways? My own experience as regards Railways is certainly in their favour. No one can properly estimate their value who has not witnessed the astounding results produced by their agency. The Railway System of England and America is perhaps the wonder of the present age. In America, the produce of the far west, west of Chicago, (a few years ago the hunting-ground of the red man) is transported by rail a distance of from 1500 to 2000 miles, to a port of export on the Atlantic, and from thence to England or Australia—actually competing with us in our own markets. America is indebted to her Railways for her position among nations. She finds it her policy to extend her Railways, and keep time with the tide of immigration pouring in upon her every year from Europe. The immigrant thus finds immediate employment; and he generally settles down, and becomes a permanent resident in the Country. If we were once to introduce Railways, I have no fear as to their extension. Other countries have rushed to the other extreme, as in Canada. The Victoria Bridge over the St. Lawrence was a mad scheme, involving an expense of £1,500,000 for one bridge, which can never pay. It is a mistake to think that the money, £400,000, required for the Deloraine Railway would be sent out of the Country; 50 per cent. at least would be spent in works of construction, which would be entirely local.

WM. MOORE.

A 20.

Hobart Town, 19th September, 1862.

SIR,

A QUESTION has arisen as to the amount of money which may be deemed to be a fair payment for the work performed by Mr. Doyne (whose professional status is, I believe, known to you,) for the Promoters of the Launceston and Western Railway in this Colony,—the distance being 44 miles.

I annex an extract from the Agreement made between Mr. Doyne and the Promoters for the work required to be performed,—and which he has executed in every way to the satisfaction of the Committee and the engineering authorities to which they have referred. It will be seen that Mr. Doyne not only agrees to perform the duty usually devolving on a Consulting Engineer, but the subsequent Surveys, Plans, Sections, Estimates, &c., as set out in the Agreement. Mr. Doyne, however, has furnished Books of Reference, though excepted in his Agreement. I shall feel obliged by your informing me what sum you deem a fair compensation for such services. Your answer by return boat will greatly oblige.

Yours faithfully,

H. DOWLING, *Vice-Chairman.*

T. HIGINBOTHAM, *Esq., Engineer-in-Chief, Victorian Railways.*

[EXTRACT.]

* * * "That he the said William Thomas Doyne will completely examine, by instruments, that part of the Island of Tasmania aforesaid over which the said parties hereto of the second part propose that the Line of the said Railway shall be carried; and also, will furnish to the said parties hereto of the second part an accurate survey and section of the route finally decided upon; and also, a report containing full and reliable information and recommendations upon all the engineering points involved in the construction of the said Railway, and estimates of the quantities and cost of each particular work, compiled and arranged in such a manner as to provide satisfactory data upon which contractors can base their tenders, and so as to afford (with the exception of extended Land Plans and Books of Reference) as complete information as that required by the Standing Orders of the Houses of Parliament of Great Britain and Ireland, on application for persons to take possession of land for Railway purposes."

Melbourne, 26th September, 1862.

SIR,

I BEG to acknowledge the receipt of your note, dated the 19th instant, enclosing an extract from an agreement made between the Promoters of the Western and Launceston Railway and Mr. Doyne, Civil Engineer, for Railway Surveys, &c. to be made by Mr. Doyne for the Promoters; and asking what, in my opinion, would be a fair compensation for the satisfactory performance of the services detailed in this extract. In reply, I beg to say that £65 (Sixty-five Pounds) per mile of Railway, would, in my opinion, be a fair and reasonable sum to pay for these services.

I am,

Sir,

Your obedient Servant,

T. HIGINBOTHAM.

H. DOWLING, *Esq., Vice-Chairman.*

Launceston, 8th July, 1862.

DEAR SIR,

THE enclosed Memorandum was supplied to the Promoters of the Railway to the Westward by Mr. Scott in August, 1860. I am requested by the Committee to ask how far Crown Land Sales made since have affected this Return; and that you will be good enough to supply a Memorandum showing this; and, at the same time, return the Memorandum to me.

Yours truly,

H. DOWLING.

R. C. GUNN, Esq.

[Enclosure.]

MEMORANDUM addressed H. DOWLING, Esq., Launceston.

	ACRES.
Crown Land leased, or open for leasing, to the South of Deloraine and Westbury	36,000
To North of Meander and Rubicon	36,000
West of Deloraine, Chudleigh, &c., (20 miles)	8,000
<i>Total</i>	<u>80,000</u>

J. SCOTT.

Launceston, 13th August, 1860.

8th July, 1862.

PLEASE furnish the information required by Mr. Dowling, as you have the accounts of Land Sales.

RONALD C. GUNN.

MR. SCOTT.

Launceston, 9th July, 1862.

THE area of Crown Lands sold by selection and auction since June, 1860, by Government, within a radius of 20 miles of Westbury and Deloraine, is close upon 28,000 to 30,000 acres,—this being the pick of the whole of that District,—leaving about 50,000 acres very inferior Land, of which about 44,000 acres are leased, but generally quite unfit for agricultural purposes.

My estimate of Crown Land available for occupation (made in June last, as from 3000 to 5000 acres,) is calculated on an average distance of 5 miles on each side of the proposed Line of Railway.

JAMES SCOTT.

R. C. GUNN, Esq., Launceston.

To the Honorable the House of Assembly of Tasmania, in Parliament assembled.

The Petition of the undersigned Landholders of the Road District of Patterson's Plains.

SHOWETH:

THAT your Petitioners have seen a Draft Bill published relative to constructing a Railway from Launceston to Deloraine, by which it is proposed to include the Road District of Patterson's Plains to share the responsibility of the assessment for the guarantee of interest that may be payable on the capital expended and rest fund.

That the proposed Railway will not be of such benefit to that District as to warrant a rate of assessment for such a purpose.

That the said Line is intended to pass through only about three-fourths of a mile, in a marsh, in the said Road District, and would be quite inaccessible; and no advantage to Petitioners for conveyance of produce or otherwise.

Your Petitioners therefore pray that, in the formation of the said Railway District, the present Road District of Patterson's Plains may be left out.

And your Petitioners will ever pray, &c.

Henry Stevenson.
F. Brownrigg.
C. Buesnel.
James Scott.
Samuel Hurst.
Joseph Brooks.
Thomas Pelf.

John Trethewie.
Charles Stuart.
Wm. Simco.
Arthur Hillier.
Samuel Dale.
Tobias Edwards.
Jno. Cape.

[1862: Tasmania. Petition No. 31.—Deloraine Railway. Presented by Mr. Sherwin. Referred to the Select Committee.]

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The Memorial of the undersigned Landowners and others, Residents in the District of Patterson's Plains, near Launceston, in Tasmania.

RESPECTFULLY SHOWETH :

THAT Memorialists feel a lively interest in the important question of a Railway between Launceston and Deloraine.

That they believe the construction of the said Railway will be followed by most advantageous results, not only to the proposed Railway District, but to the Colony generally.

That, if the Parliament shall deem it necessary to provide for a guarantee to the Government, your Memorialists beg to assure your Honorable House that they are not averse to this District bearing its share of the responsibility.

Memorialists therefore pray that means may be taken by your Honorable House to secure the early construction of a Railway between Deloraine and Launceston.

W. H. Westbrook, Landowner.
Thomas White, jun., ditto.
William Gilbert, ditto.
James Propsting, ditto.
Thomas Gee, ditto.
O. V. Lawrence.
T. Wilkinson, Landholder.
W. T. Bell, Landowner.
D. Murray, ditto.
J. H. Tucker, ditto.
Thomas Smith.
John Fawns, Landholder.
John Atkinson, as Mortgagee of Land in the District.
William Smith, Landowner.

[1862 : Tasmania. Petition No. 61.—Deloraine Railway—Patterson's Plains. Presented by Mr. Adye Douglas, and referred to a Select Committee, 26 August, 1862.]

A 23.

Melbourne, Victoria, 27th September, 1862.

SIR, I do myself the honor to acknowledge the receipt of a communication from you, addressed to my care, for Mr. Thomas Guerin; and, in reply, beg to say that Mr. Guerin is at present absent from Melbourne, and I am not aware of the probable period of his return. I shall take care that he receives your letter at the earliest possible opportunity.

I remain,

Sir,

Your obedient Servant,

EDMUND FINN.

HENRY BUTLER, *Esq.*, Chairman of Select Committee.