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PARLIAMENT OF TASMANIA.

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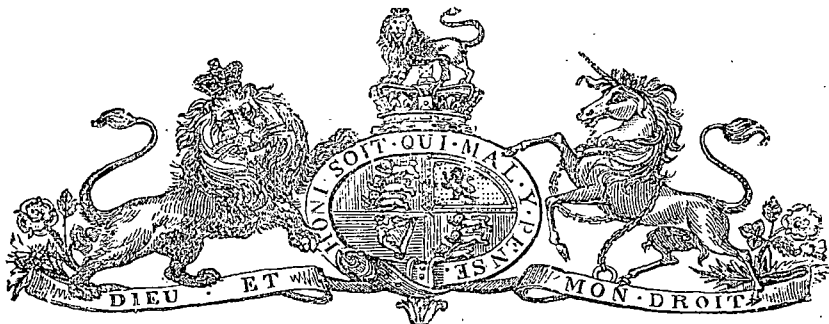
MOUNT LYELL RAILWAY COMPANY'S  
DEBENTURE BILL (PRIVATE) :

REPORT OF SELECT COMMITTEE, WITH MINUTES OF  
PROCEEDINGS AND EVIDENCE.

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*SELECT COMMITTEE appointed, on the 23rd May, 1894, to consider the Bill to authorise the Mount Lyell Railway Company, Limited, to borrow a Sum not exceeding £150,000 upon the security of Debentures carrying Interest guaranteed by the Government of Tasmania.*

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MEMBERS OF THE COMMITTEE.

MR. MILES.  
MR. GILL.  
MR. MULCAHY.  
MR. BRADLEY.

MR. DAVIES.  
MR. URQUHART.  
MR. N. J. BROWN. (*Mover.*)

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DAYS OF MEETING.

Friday, 25th May, 1894; Tuesday, 29th May, 1894; Friday, 1st June, 1894; Tuesday, 5th June, 1894.

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WITNESSES EXAMINED.

Mr. W. Knox, Managing Director Mount Lyell Company; Mr. F. A. Catten, Engineer to Mount Lyell Company; Mr. R. M. Johnston, Government Statistician; Mr. Belstead, Secretary to Mines Department; Mr. A. Montgomery, Government Geologist.

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R E P O R T.

Your Committee having taken evidence in support of the allegations contained in the Preamble of the Bill, have the honor to report that the said Preamble has been proved to their satisfaction.

Your Committee having agreed that the Preamble should stand part of the Bill, then entered upon the consideration of the several clauses, and made certain additions and amendments, which are embodied in an amended Bill attached to this Report.

Your Committee have the honor to present the Bill, as amended, for the favourable consideration of your Honorable House.

NICHOLAS J. BROWN, *Chairman.*

*Committee Room, House of Assembly,  
5th June, 1894.*

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## MINUTES OF PROCEEDINGS.

FRIDAY, MAY 25, 1894.

The Committee met at 11:30 A.M.

*Present*—Mr. Mulcahy, Mr. Urquhart, Mr. Miles, Hon. Nicholas J. Brown.

Mr. Brown was voted to the Chair.

The Chairman tabled the Petition for leave to introduce the Bill (Appendix A).

Resolved, That the Petitioners be heard by Counsel.

Counsel (Mr. Edward Butler) was admitted, and addressed the Committee in support of the Bill.

Mr. W. Knox, Managing Director of the Mount Lyell Company, was called in and examined.

Mr. Knox tabled the Report of the Mount Lyell Company for the half-year ending the 31st March, 1894.

The Committee adjourned at 12:45 P.M. until 4 P.M.

### AFTERNOON SITTING.

The Committee re-assembled at 4 P.M.

*Present*—Mr. Mulcahy, Mr. Urquhart, Mr. Miles, Mr. Bradley, Mr. Brown (Chairman).

Mr. F. A. Cutten, Engineer to the Company, was called in and examined.

Mr. Cutten withdrew.

Mr. W. Knox was recalled and examined.

The Committee adjourned at 5 P.M. until 12 noon on Tuesday, the 29th May.

TUESDAY, MAY 29, 1894.

The Committee met at 12 noon.

*Present*—Mr. Mulcahy, Mr. Miles, Mr. Bradley, Mr. Urquhart, Hon. Nicholas J. Brown (Chairman).

The Minutes of the last proceedings were read and confirmed.

Mr. R. M. Johnston, Government Statistician, was called in and examined.

Mr. Johnston withdrew.

Mr. F. A. Cutten was recalled and examined.

Mr. Davies took his seat.

Mr. Cutten tabled a plan showing Routes of proposed Railway.

Mr. Cutten withdrew.

Mr. F. Belstead, Secretary to the Mines Department, was called in and examined.

Mr. Belstead withdrew.

The Committee adjourned at 12:30 P.M. until 2:30 P.M. on Friday next.

FRIDAY, JUNE 1, 1894.

The Committee met at 2:45 P.M.

*Present*—Mr. Bradley, Mr. Davies, Mr. E. T. Miles, Hon. Nicholas J. Brown (Chairman).

The Minutes of last Meeting were read and confirmed.

The Chairman tabled the following documents :—

(a) Return from the Secretary of Mines, showing mineral lands leased and applied for which will be served by the construction of the Mount Lyell Railway in addition to the Mount Lyell Company's property—*vide* Appendix C.

(b) Extract from Report on the Routes surveyed for the Mount Lyell Railway, and probable cost, by Mr. C. Napier Bell, M. Inst. C.E.—*vide* Appendix B.

Mr. A. Montgomery, Government Geologist, was called in and examined.

Mr. Montgomery withdrew.

Counsel (Mr. E. H. Butler) addressed the Committee in support of the Bill.

Counsel withdrew.

The Committee adjourned at 3:40 P.M. until 11:30 A.M., Monday, 4th June.

TUESDAY, JUNE 5, 1894.

The Committee met at 11:45 A.M.

*Present*—Mr. Bradley, Mr. Davies, Mr. Miles, Hon. Nicholas J. Brown (Chairman).

The Minutes of the last meeting were read and confirmed.

The Chairman tabled a letter from Mr. Montgomery, Government Geologist, in reply to a request from the Chairman as to his opinion as to Dr. Peters' position as a Metallurgist (*vide* Appendix D.), and he requested to be informed if any Member of the Committee desired to call any further evidence, and received replies in reply in the negative.

The Committee then proceeded to consider the Preamble of the Bill, which was agreed to.

The Committee adjourned at 12:45 P.M. until 7:45 P.M.

## V

## EVENING SITTING.

*Present.*—Mr. Davies, Mr. Mulcahy, Mr. Urquhart, Mr. Miles, Mr. Bradley, Hon. N. J. Brown.

Clauses 1 and 2 read and agreed to.

Clause 3 (Company may borrow and raise a sum not exceeding £150,000 upon the security of Debentures issued under the authority of this Act)—

Amended in line 36 by striking out the word “less” and inserting “more” in lieu thereof, and by striking out the words “nor more than thirty,” by affixing the words “and the Company, in issuing the said Debentures, shall reserve to itself the power to pay off all or any portion of the said Debentures upon giving to the holders thereof such notice as may be agreed upon by the Treasurer and the Company.”

Clause 4 (Governor-in-Council may guarantee payment of interest upon moneys received by Debentures):

Amended in line 49 by striking out the words “in Council,” and agreed to.

Clause 5 read and agreed to.

New Clause, 5A, agreed to as follows:—

5A. The balance of the said moneys to be raised by the sale or disposal of the said Debentures after the payment of the cost of constructing the said Railway, together with all Interest that may accrue upon the said moneys, shall be retained in the said Account so long as any Interest guaranteed under the authority of this Act is payable.

Clause 6 read and agreed to.

New Clause 6A agreed to as follows:—

6A. In consideration of the Governor guaranteeing the payment of such interest as aforesaid the Company shall construct the said Railway to Long Bay.

Clause 7 read and agreed to.

New Clause 7A agreed to as follows:—

“7A. So long as any Interest guaranteed under the authority of this Act remains payable, it shall not be lawful for the Company to pay any dividend or to divide any profits made by the Company amongst the shareholders thereof until the Treasurer has received from the Company a sufficient sum to provide for the payment of the half-year's Interest then current.”

Clauses 8 and 9 read and agreed to.

New Clause 9A agreed to as follows:—

“9A. Subject to the proviso contained in Section 10A, the sum of Twenty-five thousand Pounds to be deposited by the Company with the Treasurer as aforesaid, together with all Interest which may accrue thereon, shall remain in the hands of and under the control of the Treasurer so long as any Interest remains guaranteed by the Governor under the provisions of this Act.”

Clause 10. “Treasurer may apply moneys deposited with him by Company in payment of Interest,” amended in line 25 by striking out the words “Notwithstanding anything hereinbefore contained,” and inserting the words “In addition to any other rights and remedies conferred upon the Treasurer by this Act” in lieu thereof; in line 32 by striking out the word “moneys” and inserting “said sum of £25,000” in lieu thereof; in line 33 by inserting after “Act” “and any Interest which may accrue thereon,” and agreed to.

New Clause 10A agreed to as follows:—

“10A. If at any time the Treasurer shall so apply any portion of the said sum of £25,000 or of Interest thereon in payment of such guaranteed Interest as aforesaid, the said Company shall within Six months pay to the Treasurer out of any profits made by the said Company by the working of the said Railway, or by any mining operations carried on by the said Company in Tasmania, a sum equal to the amount so applied by the Treasurer in payment of such Interest as aforesaid.”

Clause 11 (If Company fails to pay interest the same shall be paid by the Treasurer out of the General Revenue of the Colony), amended in line 53 by striking out the word “General” and inserting “Consolidated” in lieu thereof, and agreed to.

Clause 12 (All moneys secured by the Debentures and paid by the Treasurer to be a primary charge on the railway) amended in line 2 by striking out the word “General” and inserting “Consolidated” in lieu thereof; in line 4 by inserting the words “together with the Interest thereon at the rate of 5 per cent. per annum” after the word “paid”; in line 7 by inserting the words “and all other property of the said Company in Tasmania”; in line 11 by inserting the words “and all other property of the said Company in Tasmania” after the word “Act,” and agreed to.

Clauses 13, 14, and 15 read and agreed to.

New Clause 15A agreed to as follows:—

15A. The Accounts of the Company in and about the construction of the said Railway shall be submitted to the Auditor-General, who shall certify that the same are properly chargeable to the cost of constructing the said Railway.

Clauses 16 and 17 read and agreed to.

Clause 18 (Costs and charges to be borne by the Company), amended by inserting the words “including the cost of the issue and sale of the said Debentures” after the word “Act” in line 2.

Clause 20 (Railway to continue subject to Act notwithstanding sale) amended in line 8 by inserting the words “and the mining property of the said Company,” after the word “Railway;” in line 11 by inserting the words “or the mining property of the said Company” after the word “Railway,” and agreed to.

Clauses 21 to 23 read and agreed to.

Bill agreed to as amended.

The Draft Report was tabled and agreed to.

Resolved, That the Chairman be instructed to present the Report at the next sitting of the House.

The Committee adjourned *sine die*.

# E V I D E N C E.

FRIDAY, MAY 25, 1894.

WILLIAM KNOX, *called and examined.*

1. *By the Chairman.*—What is your name? William Knox.
2. What position do you hold in regard to the Mount Lyell Mining and Railway Company? I am the Managing Director.
3. Will you inform the Committee as to the number of shares in the Company, and how many are, or will be, issued as paid up? At present there are 150,000 shares of £3 each actually issued. The authorised capital of the Company is 300,000 shares of £3 each, of which 150,000 have not been issued.
4. Will they be issued as fully paid up or not? Well, the future policy of the Company in regard to the issue of these shares will entirely depend upon the result of this application, because it was intended to sell these shares with a view of providing the amount of money necessary not only to construct the railway, but to put up the reduction appliances. If these debentures are obtained we will not require to issue these shares, or all of them.
5. And they may or may not be issued as fully paid up? Of course the question has not been considered.
6. Will you give the Committee what information you can in regard to the operations of the Company in developing the mine? I would like to place before you here the half-yearly report of the Company, which has been just this moment issued, giving details of the operations of the Company up to the 31st March, with a statement of the financial position at that date. If I understand you to refer to what work has been done in the mine to prove the extent of the ore body there, I would say that it has been tested by a series of tunnels, by drives made from these tunnels, and crosscuts from these drives, into the body of pyrites. Four tunnels have been passed into the ore, and the fifth is now being put in, and will prove the ore at about 420 feet below the cap of the lode. You will have read, or the Committee will be aware, that Dr. Peters was brought out here to report on the whole property. He based his favourable report and calculations on the quantity of ore exposed, and the developments which had taken place at that time. Since that time all these rich developments in silver have taken place. Winzes have been sunk in the No. 4 tunnel, and crosscuts made to test the lode, and it has been proved that, however large the estimates of those gentlemen who were requested at that time specially to report on the property were, those estimates have been considerably exceeded by the developments since. As to the amount of money which has been expended, I would say that we have taken out of the mine to date a gross value in silver and copper ores of about £65,000, which has practically been taken out during the last 12 months.
7. What other expenditure has the Company incurred, beyond the ordinary expenditure on the mine, in providing for access to the mine from Strahan? A large expenditure has been incurred in connection with the railway survey.
8. I am speaking of the road. The Company, I understand, has spent a sum of money quite independently of the Government in improving the road from Strahan? We have spent over £600 in completing the road out to the mine, *via* Howard's Plains, *via* the Queen River crossing.
9. Assuming the railway is to cost £120,000, what other expenditure in the way of purchasing and erecting plant do you expect to incur? To reduce 500 tons of the pyrites every working day, which we propose to do, we should require an expenditure of about £100,000. That is for reduction works, and for placing the body of the pyrites in such a position that it could be economically removed and transported to the reduction works.
10. Is the Committee to understand that under the existing Act the Company say they have the right to take the railway to Pine Cove if they choose to do so? Undoubtedly.
11. Would the Company exercise their right in that respect if they had to make the railway themselves? Yes, for the reason that we can get all the deep water that is necessary at Pine Cove; and we can save by going there, instead of to the township of Strahan, an extra expenditure equal to about £15,000.
12. And if the Legislature agree to this Bill, enabling the Company to borrow the money on advantageous terms, where will the Company guarantee to place the terminus? They will guarantee to take the line right into Strahan.
13. And connect it with the Government railway? That was the intention of the Company.
14. What guarantee will the Company be prepared to give to satisfy the Legislature that they will place the terminus in Strahan? They will give any written undertaking to that effect. You are aware that we are now completing the surveys right into the township of Strahan in anticipation of this measure passing the Legislature. I must, however, explain that we have not yet ascertained the prices that may be demanded for the freeholds through which any line may pass in reaching the existing wharves in Strahan. Our guarantee of course would be on the assumption that the prices asked for these freeholds are not absolutely prohibitory, and that we meet with no unreasonable obstruction.
15. The Committee have observed that there is a clause "provided that the Company should employ Tasmanian labour as far as practicable." Are you prepared to give the Committee an assurance as to any mode in which the Legislature can be assured that that portion of the contract will be faithfully carried out by the Company? I can assure you that the intention of the Company is to respect not only the letter but the spirit of that obligation, and that the fullest effect will be given to it in every way.

16. What has been the action of the Company hitherto in that regard? We have only employed one person outside the Colony up to the present; and all those otherwise at present employed on the mine are residents of Tasmania.

17. *By Mr. Bradley.*—Have the Company made any attempt to issue the balance of the shares since the important development which took place in the mine about the end of last year? No.

18. Has there been any application made for them in the old country or elsewhere? No.

19. With regard to employing Tasmanian labour, of course I have great faith in what you say. You have spoken straight out on the matter, but still the clause says "as far as practicable," which leaves it an open question, and rather indefinite? I may say in reply that we have entered into an obligation with the Premier that the Minister of Public Works and the Honorable N. J. Brown will constitute a Committee to decide what Tasmanian labour is eligible for employment.

20. With regard to the timber, I am not afraid of the Company going outside the Colony to obtain it? The Committee may rest perfectly satisfied that the intention of the Company is to respect this obligation to the fullest extent, because we appreciate the fact that a large amount of the support we shall receive is given upon these grounds.

21. *By Captain Miles.*—Will the Company agree to a clause being inserted in the Bill providing for the terminus of the line being at Strahan? It is the intention of the Company to place the terminus of the line at Strahan in the event of this Bill passing. It is part of our most important obligation to do so.

22. What amount of money has been spent in developing the mine, making surveys, and in general operations up to date? The amount of money spent in surveys is very large, in consequence of the difficulties we have experienced in finding a practicable route to the coast, and one which would not be extravagantly expensive. On account of surveys in connection with the railway we have spent, to the 31st March, £7218 1s. 9d., and the expenses since that date, and before completion, will quite absorb another £1000.

23. Can you give us any estimate of the bulk of the expenditure in opening up and improving the mine generally? In addition to the amount I have just mentioned, the present Company has spent nearly £20,000 in general work.

24. Making in all about £28,000? Yes, about £28,000.

25. How soon would you be prepared to commence operations if this Bill passes? Immediately. We are placing £25,000 in the hands of the Government, and we are leaving ourselves additional funds enough to commence at once.

26. How long will you be in the completion of the railway? That will greatly depend on the time of the year that we make a start. Assuming that we are able to get our clearing well advanced during the immediate winter, and that we had a clear summer, we reckon that on October twelve months we should have the whole thing in working order. The intention of the Company is to let the work in sections, to commence at both ends and at various points along the line simultaneously, so that the whole of the work will be in hand at once.

27. How many men do you think you will be able to put on within a short time of the passing of the Bill—pick and shovel men and so on? Mr. Cutten, the engineer, will be able to answer that question better than I can, as I am anxious that the Committee shall have the most correct information practicable.

28. *By Mr. Mulcahy.*—With regard to starting immediately, would your financial arrangements permit that? Yes, we could commence our clearing at once.

29. Are you sure of getting your debentures sold? I have no fear on that account at all.

30. Regarding the reducing works on the mine, will the material used for these works be of a character that you could get locally, or will you have to import it? I think a great deal of the material could be made in the foundries in Hobart; but a certain proportion of it would have to be imported, because of its being protected by special patents.

31. Would it suit the Company just as well if the Government were to construct the line? Certainly not; and I will state my reasons for saying so. First of all, we are losing very valuable time now; and a private Company would, in my opinion, be able to construct the line very much more rapidly than the Government could, and, we venture to think, much more cheaply than the Government would; but further, the measure of profits from the mine will depend entirely on economical reduction, transport, and realisation. Now, one of the chief items of the expenditure will be the transport to the Coast, and the Government could never work that line anything like as cheaply as the Company could.

32. Is the line to be of the same character as you have taken powers for under the last Act,—I mean on the Abt and Fell systems? Yes: there is no other means of getting through.

33. How much capital has been paid up by the existing shareholders? The amount subscribed by the existing Company was £17,500; but there was a considerable amount of money spent before that.

34. *By the Chairman.*—About £20,000 in all? Yes, over £20,000. Our estimate is, and I think it is justified, that there has been spent on the mine over £40,000 out of capital subscribed by the present and previous Company; and this is quite irrespective of a lot of work we have been doing this last twelve months which has been provided for out of the proceeds obtained from the rich silver ore.

35. *By Mr. Mulcahy.*—Would it be to the advantage of the Company to take the line into Strahan, thus doing away with the necessity for wharves and stations? We have considered the matter closely, and have come to the conclusion that our own interests would only require us to go to Pine Cove. We would be able to thoroughly and efficiently do all that was necessary for the purposes of the Company at Pine Cove.

36. As regards the immediate interest, the Company cannot possibly get to work until about two years' time; how do they propose to pay the interest during that time—out of the £25,000 for the first year or two? I am sorry you have formed the impression that we cannot get to work for two years. We estimate that at the beginning of next winter we will have the line sufficiently advanced to get our heavy stuff over it.

37. *By the Chairman.*—You expect to be able to use the line in 12 months? Yes, we expect to be able to use it for bringing up material. We would consider that we have failed considerably in our intentions if we are not in considerable work within 12 months from the date of our getting this money from the sale of the debentures.

38. *By Mr. Mulcahy.*—Supposing the line is opened sufficiently to get the machinery through, you could not then have the reduction plant in operation for some months? All the necessary work at the mine will be commenced in anticipation of the heavier material coming up.

39. Until you are in active operation, the interest is to be paid out of the £25,000? Yes, but we have given an undertaking that if we reduce the amount by payment we shall subsequently, out of our first profits, make it up to £25,000 again.

40. *By the Chairman.*—So that the £25,000, with the accumulated interest, will be still to the credit of the Treasurer? Yes. The intention is that it shall go to pay the interest for the first year or two, but it will be obligatory on the part of the company to reinstate the amount so as to keep £25,000 there intact as a permanent guarantee of good faith. We had an interview with the Premier, and it was so arranged.

41. *By Mr. Butler.*—Will you inform the Committee as to whether or not it is absolutely necessary to have a railway to work this mine properly? Certainly, it is absolutely necessary. I recently paid a visit to America, and on the way through I visited various large copper and silver mines, also the Rio Tinto and Tharsis mines in the south of Spain, which are similar formations to Mount Lyell. These are gigantic undertakings, and have their own railways to the coast, and show that there is no doubt that you should have the handling of your own stuff and in your own way. There is one aspect of the operations at Mount Lyell which I would allude to. The Rio Tinto and Tharsis mines export enormous quantities of their ore to the sulphuric acid makers in England, who take the sulphur out of the ore and sell the residue to others, who extract the metallic contents. Three or four hundred thousand tons of ore are sent away in that manner every year. Recently we had a visit from one of the largest purchasers in Liverpool of that pyrites ore, and he so liked the quality of our ore that he stated he would be prepared to enter into a contract for the purchase of large quantities of it if cheap freight from here to London could be arranged. The peculiar feature about the Mount Lyell ore is that it is somewhat higher in the percentage of sulphur it contains than those other deposits I have spoken of, while in the great bulkiness it is twice as rich in copper and three times as rich in gold and silver. Thus for the sulphuric acid maker it is a better material and more profitable for him to handle, and the company look forward, if they can get cheap freights, to shipping away considerable quantities of the crude ore. This will be treated in England by the cheaper methods they have there; but it will be hopeless to attempt to send it away if we have not the railway. I have, therefore, no doubt whatever that the railway is necessary to the ultimate success of the whole undertaking at Mount Lyell.

42. Will you inform the Committee as to your endeavours to raise the necessary funds in England? When I went to London, apart from the obstruction which I experienced in consequence of the absence of the railway plans and estimates which are only now being completed, I encountered there one of the most severe financial depressions the world has seen for many a long year. However improved the financial position may have become since, still that extent of confidence has not been restored which would enable us to get the amount of money we require without having this additional guarantee and support. I call this support more of a moral support—we are not looking to the Government or the Country for one sixpence, and we do not expect the Government to give us any actual financial help or support; I don't think there ever will be any necessity for it. What we do want is this—that we can come forward with our issue of debentures and feel that we have the support of Parliament to prove that this is a reliable and responsible undertaking, and that the Colony believes in it.

43. Do you think that the Government run any risk by giving this guarantee? None whatever. I speak not only from the expert advice we received before going into this enterprise, but after consultation with the most eminent practical men in America, in London, and in Spain, who treat this same class of ore, and who are treating successfully and very profitably deposits which contain less copper, gold, and silver.

44. You can state that from conversations you have had with these men? Yes.

45. Have any of these persons visited the mine? No; but they have seen samples of the ore, and know its general character and our conditions.

46. When the railway is constructed, and the whole of the works in full swing, how many men do you think will be employed? Basing my estimate on the production and handling of 500 tons of ore a day (which, I may say, we propose to increase to 1000 tons a day), it would require the services of at least 1000 men, in the reduction works, getting the ore, transporting it, and handling it on the railway. I base these figures on my experiences at Broken Hill, where we handle large quantities of material and employ a large number of men: our operations would be eventually upon an equally large scale.

47. In the Bill it provides for the payment of the interest quarterly, and also for the accounts to be furnished quarterly: do you approve of that, or would you suggest any alteration? It would be a very inconvenient arrangement. The interest on the debentures is always paid every half-year, and the accounts of the Company are made up every half-year. I would like that clause altered to suit those conditions.

48. Have any other mines been opened up near Mount Lyell which are likely to prove a benefit to the country? Yes.

49. Will you kindly name them? There are the North Mount Lyell and Idaho mines, where there is undoubted evidence of large deposits of pyrites existing, which will be quite useless unless they get cheap transport of ore and material to and from the Coast.

50. *By the Chairman.*—Can you name any other mines? There are several other mines on the King River. There is, for instance, the Mount Huxley Mine; the reports I have received about it show it to be a large deposit of low-grade ore which may pay if worked on a large scale. It would require the same economic treatment and transport as the Mount Lyell, and this line would serve its purpose also.

51. *By Mr. Butler.*—I wish to prove the transfer of this property from the Mount Lyell Mining Company, Limited, to the Mount Lyell Mining and Railway Company. Was there such a transfer? There was.

52. *By Mr. Urquhart.*—Is it intended that this line should carry passengers and produce for the public? Yes.

53. Is there any provision for that in the Bill? Yes.

54. *By the Chairman.*—Can you tell us the quantity of ore that has been raised? The total amount of rich ore that has been raised to May 10th is 398 tons 4 cwt. 1 qr. 13 lbs., containing 500,017 oz. of silver, and 93 tons 3 cwt. 1 qr. 27 lbs. of copper, averaging 1255½ oz. silver and 24·43 per cent. of copper per ton. This is a phenomenal average, but one like that does not constitute the permanent wealth of the mine. We hope, of course, to get more of these rich deposits of ore, but the enduring value of the mine is in the low grade deposit, of which there are millions of tons.

55. *By Mr. Bradley.*—Would your Company be prepared to hand over to the Government your route and surveys at cost price if Parliament does not see its way clear to fall in with your views in regard to this Bill? It is very difficult for me to answer that question. Speaking personally as an individual director I should say “no”—I see no object in it. We have no doubt that we can eventually obtain all the money that is necessary, and we only ask for this guarantee by Parliament as a matter of speed. Everyone is losing money by the delay, but with a return of public confidence at home there is no doubt that the money will be eventually obtained, but much valuable time would be lost.

#### FREDERICK ALFRED CUTTEN, *called and examined.*

56. *By the Chairman.*—What is your name? Frederick Alfred Cutten.

57. You have been employed by the Mount Lyell Mining and Railway Company to survey a line of railway from Mount Lyell to Strahan? I have.

58. Will you give the Committee some information as to the efforts that have been made, and the expenditure that has been incurred, in endeavouring to select the best route? The first attempt that was made was to get from Strahan to Mount Lyell by a route known as the road route; that was practically getting on to the Lynchford road about 5 miles along and following it to the Queen River. That was found impracticable, because we had to rise 900 feet in the first 6 miles, and then fall 500 feet to rise another 900 feet. This route was therefore abandoned, and an attempt made to get through to the westward by the Tully route. That also was across bad country, the route passing over no less than two saddles, continually rising and falling, and eventually getting over to Howard's Plains and down to the Queen River at the same point as the other one. The valley of the Queen River at machinery site is only 500 feet above the level of the sea, and Howard's Plains, a place we are bound to go over, is 900 feet above the sea, so that there has to be a rise of 400 feet out of the Queen Valley that has to be provided for. We then tried for a route following the natural courses of the rivers. We followed down the Queen River to its junction with the King River, and down that river to its mouth, but we found that from the junction with the Queen there was a terrific gorge which was not particularly safe. We finally determined therefore to abandon this portion of the route, and go by a route following the Queen River as far as Hall's Creek, and then working up this creek and down again on to the King River by a creek known as Sailor Jack's Creek to what was originally known as the Upper Landing on the King River. Upon 4 miles of this portion we have adopted the Abt system to get up and down, to get clear of the rough and dangerous portions of the King River. As it turned out, to go by the Abt system means a shorter line.

59. All these examinations resulted in your finding that your company would attain all they required by constructing the line to Pine Cove? Yes, it is the shortest, cheapest, and most effective line to deep water.

60. Is it your opinion that all the requirements of the Company will be effectually provided for by making the terminus of the line at Pine Cove? Undoubtedly, it will suit the Company perfectly.

61. Is there deep water there? Yes, there is a magnificent channel of water, with a perfectly clear entrance to it 80 or 90 feet deep.

62. How is it situated in regard to shelter? It is perfectly sheltered.

63. If the Company were thrown back on their rights under the previous Act, enabling them to construct a line of railway, would you advise them to construct the line only to Pine Cove? Undoubtedly, it is the shortest and most effective route.

64. What would be the difference in the cost approximately, of extending the line to the present harbour at East Strahan? About £12,000. It gives us an extra four miles of line to build.

65. Will there be any difference in regard to the crossing of the King River? That is allowing for the estimate of recrossing the King River. It means a serious thing for the Company, because four miles extra of running, with four trains a day, is 16 miles, and as a running mile costs about 3s., it comes to something considerable, besides the time occupied. The line from Mount Lyell to Pine Cove is 18½ miles long, and it is possible to work that in one locomotive day, 10 hours. If you extend the line four miles you cannot do it in one day.

66. Assuming the Legislature agree to the Bill now before us, the provisions of which you are probably acquainted with, how soon could the Company set to work to commence the construction of this line? As far as the Company is concerned, it could set to work to-morrow if necessary, that is, in regard to the clearing.

67. Are the plans and specifications ready? They are not fully finished, but still the clearing could be gone on with at once.

68. Is the route definitely fixed? Yes.

69. And how many men do you suppose could be employed immediately, or within the next three months, supposing work were commenced on July 1st? Directly or indirectly we could employ about 150 people at once, or within the next few months.

70. You do not quite understand me. Assuming that all the necessary arrangements are made, and Parliament agrees to the passing of this measure, and the Company are able to commence work, say on July 1st next, what number of men would you require to employ immediately in the preliminary work of clearing and so on? We can employ 150 men straight away at clearing and falling, and as fast as they clear we will follow up with employing a large body of men. On the formation alone I suppose we can put 700 or 800 men on; the whole country is an easy rock country, and you can put the men on anywhere you like independently.

71. Would the winter weather interfere with the work? No, not to any great extent.

72. *By Mr. Bradley.*—You have been some considerable time in the district, have you not? I have.

73. Do you know of any mineral sections there that are likely to come to the front through this railway? There is the North Mount Lyell. I have not seen it myself, but they say they have struck a body of pyrites there which is going to prove very rich. There is no doubt there is gold all round the country; you can get it in every direction in large or small quantities, but of course the pyrites I know nothing of, beyond seeing the immense body of it they have in the Mount Lyell Mine.

74. What other sections are there on the line? There is the Princess, the Huxley, the King River, which is quite close to the line, and Woody Hill and Flannigan's Flat, which are also in close proximity. Then again there is the M'Cusick's and Howard's Plains—in fact this line will open up the whole country.

75. With your knowledge of men in Tasmania, do you think that you will be able to get all the men you require without sending out of the country—I mean both as regards labourers and mechanics? That is rather a difficult question to answer, because I cannot tell how many men are here.

76. I mean, taking the Tasmanian workmen generally? Speaking of when Public Works were in full swing, there were men enough here for all our requirements; of course, I cannot say what has become of these men since.

77. Do you think the timber in the District would be sufficient? The whole of the timber will have to be obtained from the mills in the south of the Island; it will require an immense amount of timber.

78. As far as Tasmanian timber is concerned, is there any need to go out of the Colony? Oh, no, there is no need to go out of the country.

79. Can it be landed at Strahan from the mills here cheaper than anywhere else? Yes. For sleepers, bridgework, and all construction work, we will have to obtain the timber from the southern mills. We cannot get it anywhere within the limits of our own line.

80. *By Mr. Mulcahy.*—Is it the present intention of the Company to bring the line right round to connect with the Strahan and Zeehan line? No, there is no great object to be gained by doing so, because the wharf accommodation would not be sufficient to carry the traffic. New wharves would have to be provided.

81. Will bringing the line round as far as you intend bringing it not be a great advantage to Strahan itself? I should think so. The Strahan people think it would be a great advantage.

82. What is the distance going round from Strahan Station to where you propose to make your terminus? About half a mile. The Town Board of Strahan have made a survey lately, and intend completing the road round there as an esplanade for their own purposes.

83. Do the Company propose to construct their own jetties? It was the proposal, so far as I understood, to build jetties there.

84. What number of men can you put on at once for clearing? About 150.

85. *By the Chairman.*—Will the £150,000 proposed to be provided for under this Bill be beyond all doubt sufficient for the purpose of constructing the line as designed, fully equipped and complete, from the Mount Lyell mine to East Strahan? I think so. I have made a very careful estimate, and have taken out the quantities very carefully.

86. Has any margin been left for contingencies? Yes, a very fair margin indeed.

87. What will be the difference to the Company, in your opinion, between the daily working expenses of a line from Mount Lyell to Pine Cove and a line from Mount Lyell carried out, as the Company are willing to carry it out conditionally on the necessary legislation being passed, to Strahan? About £2 a day in running and maintenance, or about £600 a year.

88. And the interest on the extra cost? Exactly so. You could put the capital cost of the extra  $4\frac{1}{2}$  miles at £12,000.

88. *By Mr. Mulcahy.*—What is the gauge? 3-feet-6-inches, the standard gauge of Tasmania.

89. *By Mr. Butler.*—Would the construction of this line by the Company be cheaper or dearer than if it was constructed by the Government? The construction of this line by the Company would be very much cheaper than by the Government, seeing that the Company can deal directly and not be hampered as

the Government would be. As a matter of fact the Government could not construct this line, as it will be an entire departure from their present type, seeing that we have four-chain curves and 1-in-20 gradients. They would have to get special machinery and have a special department for this particular line. If the Government standard were attempted to be adopted in the same country we might put 50 per cent. more on to the cost of getting through.

90. As far as the employment of men is concerned, you think that after the clearing is commenced, there is no reason why 700 or 800 men could not be employed? Yes.

91. When work is in full swing, how many men could be employed in connection with the railway and the works on the mine? I think that 1500 people would find employment, directly and indirectly.

92. *By the Chairman.*—That is in the construction of the Railway, and the work going on at the mine? Yes.

63. Assuming that you are the Engineer employed by the Company for the construction of this line, what arrangement would you recommend in order that some guarantee might be given to the Legislature as to the employment of only Tasmanian labour, so far as it is available? I suppose the Company could only protect itself in that way by each man having some sort of certificate that he is a Tasmanian from some local authority, or some one acquainted with the men—a Justice of the Peace or anyone of that sort.

94. Do you think the Company would be hampered in any way by that being a condition? It would be a hampering clause if the Company were not allowed to employ anyone from outside Tasmania.

95. The proposal is that Tasmanians shall have an opportunity of being tried at all events. I do not apprehend that there is any disposition to bind the Company to employ Tasmanian labour if they find that such labour as is available is inefficient or unsuitable for their purposes, but the general desire on the part of the Legislature and other members of the community is that those who are in Tasmania shall have an opportunity of being tried before there is any importation of labour from elsewhere? I should take anyone who came forward, and undoubtedly give him a trial. From my own experience of Tasmanian labour I don't think labour from any of the other colonies is likely to beat it. The Tasmanians are most efficient men, more especially if it comes to dealing with axe work or the bush, as such country as we are going through.

96. Apart from any desire on the part of the Legislature to insure that, you will give the Tasmanians the preference? We will give any man his work, and if he proves efficient we will keep him on.

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WILLIAM KNOX, *recalled.*

97. *By Mr. Butler.*—There are a few more questions I wish to ask you, Mr. Knox. What is the proportion of coke that would be necessary in treating this low grade copper ore at Mount Lyell? Six tons of ore would require one ton of coke.

98. So that if the mine produces 300,000 tons of crude ore in the year it would require 50,000 tons of coke? Yes.

99. Would this coke be made on the spot, or would it have to be imported? Our experience is that the colonial cokes have not been so advantageous as the imported coke. The best coke for smelting purposes is obtained from Cardiff, in Wales; and if the Company owns its own railway much of the disabilities would disappear, because we would not have high rates of freight from the coast to pay. I am speaking from the experience we have had in Broken Hill, where we have to carry the coke a considerable distance from the port to the mine. We have to pay a high rate of freight, and if there were not that freight we could use an inferior article with advantage: but when we have to pay a high rate of freight it is manifestly to the great advantage of the smelting Company to carry coke that will do the best work. That disability in regard to freight may disappear or be greatly reduced if we became our own carriers.

100. It would require the importation at Strahan of 50,000 tons of coke a year? It would require a large amount, probably between 30,000 and 50,000 tons a year when the operations were in full swing.

101. And that would be to the advantage of the port and the general income of the Colony? Yes, most decidedly. We reckon that we should require to take up about 75 or 80 tons of coke a day.

102. And that would necessitate a steamer or vessel of 160 tons coming in with coke every two days? Yes. A question arose as to whether it was the intention of the Company to connect from the point of its wharves with the Government line, and I stated I believed the Company would be prepared to make that connection if it were found that no unreasonable demands were made upon the Company for the acquirement of the freehold property it would pass through. After hearing the further evidence that has been taken, I cannot imagine that it would be a very expensive operation, and as portion of the road has already been carried round the bend the Company would desire to coöperate with the Government in any way they can in the matter.

103. Would you prefer being in connection with the Government line at Strahan? Yes, if reasonable arrangements could be made with the Government for that purpose.

The Committee then adjourned.

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TUESDAY, MAY 29, 1894.

ROBERT M'KENZIE JOHNSTON, *called and examined.*

104. *By Mr. Butler.*—What is your name? Robert M'Kenzie Johnston.

105. And you are the Government Statistician? I am.

106. In the evidence given the other day before this Select Committee one witness stated that when the Mount Lyell Mine was in full swing there would be permanent employment there for 1000 men. I wish you to tell the Committee, upon the basis of there being 1000 men employed in the mine, how many persons it would necessitate living in the district—I mean in regard to their families and those who would supply their requirements? I have examined very carefully the statistics of corresponding districts, in regard to how many persons would be required to reside in the district besides those actually engaged in the mining industry. Taking Waratah and the Zeehan and Dundas mining centres as a basis, I find it would require 3300 persons, besides the 1000 miners. That is to say, for every miner there would be 3·30 other persons, composed of women, children, and other dependents, besides other breadwinners and their dependents, which would actually represent a larger number than the miners.

107. *By the Chairman.*—Do you include them in your calculations? Yes, I take it that these 1000 miners would involve a population of 4300 persons as a whole. I think that is pretty near the truth; for the variation between Waratah and the South-eastern mining centres, including Zeehan and Dundas, and the population of Strahan, which purely depend on this industry, shows that Waratah has a total population of 3760, and the other centre a population of 4800; the mean between the two being 4300, which I think would be a very safe estimate to make.

108. Can you give the Committee any information as to the consumption of duty-paying goods by a mining population such as we are talking of, compared with other branches of population, the agricultural for instance? The amount that would be required to be consumed would be considerably larger, but I will enquire into the matter and give you more definite information.

109. The general impression is that mining communities consume very much more dutiable goods than others? I believe such is the case, from the larger number of adult males and the higher standard of living generally. I think they would require per head a larger amount of dutiable goods than a corresponding number in a general population.

FREDERICK ALFRED CUTTEN, *recalled.*

110. *By the Chairman.*—The Committee have recalled you, Mr. Cutten, for the purpose of getting some fuller information as to your estimate of the cost of this line of railway. We have not the advantage of having your evidence before us, but I think you stated the other day that your estimate was £120,000? £135,000.

111. Will you inform the Committee if you have any confirmatory evidence to produce? Mr. Napier Bell made an estimate of the same nature, which came to £125,000. His estimate, however, was for a line only as far as Pine Cove, while our estimate includes a line right into Strahan.

112. Can you produce Mr. Napier Bell's statement to that effect? I have not got it here; it is in Strahan in my camp.

113. Can it be in the hands of the Committee before the proceedings close? I think so.

114. Is that estimate made on exactly the same lines as yours? The estimate we have just completed is made from the actual contract plans. The estimate made by Mr. Bell was made from the plans on which the contract survey was based; practically the details were the same.

115. Was it made entirely independently of your estimate, and without consultation with you? Entirely so; Mr. Napier Bell used his own figures, taken out in his own way.

116. *By Captain Miles.*—What is the total distance upon which you will use the Abt and Fell system? 4 miles and 9 chains.

117. And what is the distance upon which the ordinary system will be used? About 18 miles. The total distance is 22½ miles.

118. Are there any great difficulties in connection with that 18 miles? There are 3 miles of fairly stiff hilly country, but nothing very exceptional. There are no great engineering difficulties in it.

119. Will that 18 miles cost more than any ordinary line in Tasmania? I doubt if it will cost as much, seeing that we have 5 miles at one end and 6 miles at the other end almost perfectly flat, with nothing to be done but surface forming.

120. Do you know the Zeehan and Strahan line very well? Yes.

121. I suppose the cost of constructing the Mount Lyell line would compare very favourably with the cost of the Zeehan-Strahan line? The Mount Lyell line would cost less, seeing that we are using a smaller base. We are using a 10ft. base, as against a 14ft. base on the other line. All bridges and that class of work are on the same designs as those used on the general Tasmanian railways.

122. *By Mr. Bradley.*—Did Mr. Napier Bell form his estimate from his own personal observation? From his own personal observation. He had the plans produced his own way. He was all over the route, and all the routes that we tried.

123. *By Mr. Mulcahy.*—Does your estimate of £135,000 include rolling stock? Yes; it includes the line fully equipped.

124. Can you give us any idea of the sum that would be spent in labour out of that £135,000? Roughly speaking, about £90,000 or £95,000.

125. And have you all your specifications ready to proceed with the work at once, if your financial position admits of it? We are not quite finished with all our plans. The drafting is not quite completed, but it will be done in a fortnight or three weeks, and the specifications will be drawn at the same time.

126. *By Mr. Butler.*—Do you produce plans showing the different routes tried, and their lengths? Yes. (Plans produced.)

127. *By the Chairman.*—There is one point upon which the Committee would like some information, and that is this—have you any knowledge, not from actual survey of course, but in a general way, of the country beyond the point at which the Mount Lyell end of the railway will terminate, I mean to the northward or the eastward? As a matter of fact the Company has had a trial survey made from the mine working back through the Gap under Mount Owen, but the country was found to be very rough, and full of gorges.

128. The intention of the Company is to connect the workings of the mine with the terminus by a tunnel? Yes, either hauling the stuff over the hill or through it; 57 chains of tunnel saves us constructing 7 miles of railway line.

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FRANCIS BELSTEAD, *called and examined.*

129. *By the Chairman.*—What is your name? Francis Belstead.

130. You are Secretary for Mines? Yes.

131. The Committee wish you to give them any information you can as to the quantity of land taken up for mining purposes at Mount Lyell, and the revenue derived from that land at the present moment? I cannot give you that information off-hand, but I can supply it in a short time.

132. From your knowledge of the country round Mount Lyell and the vicinity, do you think that this line of railway will be beneficial to other mining properties as well as Mount Lyell? Without doubt it will.

133. Can you name any mining properties that will be benefited by the construction of this line, apart from the Mount Lyell Company itself? All the adjoining and surrounding sections at Mount Lyell will be benefited. There is, for instance, the West Mount Lyell, the North Mount Lyell, the Idaho, and several others.

134. Will the Mount Huxley sections be benefited? Yes, they will connect with this line. There are also the King River, Hall and Harvey's, Woody Hill, and M'Cusick's Creek mining properties which will be benefited. On many of these properties there are important developments going on, notably at M'Cusick's Creek and the King River.

135. How far is the nearest point of the Mount Huxley sections from the terminus at Mount Lyell? It would be by the plan about  $2\frac{1}{2}$  miles.

136. *By Mr. Mulcahy.*—Do you know anything as to the probability of this line forming a part of the trunk line through to the Ouse? It crosses the present main road, if it may be so termed, at Mount Lyell.

137. Was there not a flying survey made for a railway from the West Coast to the Ouse? I believe so.

138. Does the route of the Strahan-Mount Lyell Railway coincide with any part of that surveyed line? The upper part of the railway does, but not the lower part. The route of the flying survey went straight into Strahan, not down the valley of the King River as the railway does.

139. *By Mr. Butler.*—You have visited the Mount Lyell mine? Yes.

140. And thoroughly inspected it? Yes, I have.

141. And from what you know of the mine do you think it is a mine that is likely to pay? From all I hear of it I believe it will, certainly. My opinion on that subject is of very little value; I suppose you recognise that. I only go by what I hear and read, and so on.

142. *By Mr. Urquhart.*—Have you been there? Yes, I have been there, but my opinion of the mine must not be taken as being of any particular value, as I have no expert knowledge.

143. *By Mr. Bradley.*—The opinion you have expressed as to certain mining sections being benefited will include, I suppose, all the sections between Strahan and the terminus at Mount Lyell that the line would be likely to touch or serve? Yes, that is so.

The Committee then adjourned.

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FRIDAY, JUNE 1, 1894.

ALEXANDER MONTGOMERY, *called and examined.*

144. *By the Chairman.*—What is your name? Alexander Montgomery.

145. What are you? I am Chief Inspector of Mines and Geological Surveyor for the Colony.

146. Are you acquainted with the object of the Committee? Yes. I am aware that the Committee is to consider the proposal that the Government should guarantee the interest on the Mount Lyell Railway Company's debentures.

147. Have you made an examination of the Mount Lyell Company's mine? Yes, on three occasions: in March, 1890, again in February, 1893, and once more during last week.

148. Is there a large body of ore there? Yes. The Mount Lyell mine is a very large body of copper-bearing iron pyrites capped with auriferous gossan. On the surface it is about 300 feet wide, and in No. 3 tunnel it has been passed through for nearly 300 feet without reaching the western wall. It is exposed on the surface for about 450 feet, and underground has been followed in the opposite direction for some 350 feet, making a total known length of about 800 feet. Above the No. 4 tunnel the known depth is about 180 feet, and taking the ore body as 800 feet long, 200 feet wide, and rejecting 100 feet on the western wall, which is poor in copper, the total ore in sight may be reckoned at about  $3\frac{1}{4}$  million tons, and as there is probably quite as much more below the No. 4 tunnel as above it, the quantity of ore is probably not less than  $7\frac{1}{2}$  million tons, and may be a great deal more. Fuller particulars have been given in my official Report of 6th April, 1893.

149. *By Mr. Butler.*—What is the average value of the pyrites? The average value of the pyrites is from  $4\frac{1}{2}$  to 5 per cent. of copper, 2 oz. of silver per ton, and 3 dwt. of gold per ton, amounting in value to about £3 per ton. On the footwall on the eastern side, below the No. 4 tunnel, a rich pocket of ore has been discovered, from which 415 tons of ore, containing 530,000 ounces of silver and 102 tons of copper have been extracted and sent away for sale; 293 tons of the ore came from a space of only 3893 cubic feet. There is every reason to believe that as the workings are extended further rich bunches of ore similar to this will be discovered.

150. Do you think it will compare favourably with any other copper mine in the world? I certainly do not think that there is any doubt that, with skilful management, the mine will prove a most remunerative investment. The output of the mine will probably be from 500 to 1000 tons of ore a day, or up to 10,000 tons of copper annually. This will be equal to a value of from £500,000 to £600,000 per annum, of which about £200,000 is likely to be clear profit. I have checked the figures as to the cost of smelting the ore and marketing it, and estimate that the operations should bring in a profit of from 50 to 100 per cent. per annum. In my opinion, though it may be a bold thing to say, I do not know of any venture that has a greater certainty of being a success than the Mount Lyell mine. With proper management it cannot fail to pay handsomely.

151. Can you mention any other mines beside Mount Lyell that are likely to be benefited by the construction of this railway? Yes, there are the North Mount Lyell and Idaho mines, which are in its neighbourhood, and likely to become very valuable. The North Mount Lyell has already developed a body of rich copper pyrites at the surface, and an adit is now being driven to intersect it. The Idaho mine has not yet got the deposit, but is working in a black clayey deposit containing native copper; and some years ago 40 tons of metallic copper were washed from the creek traversing this property.

152. *By Mr. Davies.*—What distance is Mount Huxley from Mount Lyell? It is about 8 miles by the closest route.

153. And would this railway benefit that property? Yes, it would benefit the whole surrounding district. Round Mount Lyell there is a large mineral district over which alluvial gold has been found in almost every creek, and several reefs have been from time to time worked, the King River, Guilfoyle, Princess River, Macquarie, Madam Howard, and Woody Hill mines being cases in point. I have little doubt that the railway will be of very great benefit in opening up an extensive district here. From what I have seen of the country it seems likely that the Mount Lyell route will provide a better inlet into the country round Mount Tyndall and the back of Mount Reid than any extension of the Zeehan line.

154. *By the Chairman.*—Do you think the Government would run any risk in acceding to the wishes of the Company, and guaranteeing the interest upon these debentures? It would be the means of opening up a large extent of country, and I do not think that the colony would run the slightest risk. The railway is an absolute necessity for the working of the mine.

155. Have you any knowledge of the country up to Mount Reid? I have not been through there from Mount Lyell, but I know there is a deposit of copper near Lake Dora, which has been known for many years, and cannot be worked until access is given to it. The Mount Lyell line would give easier access to the country to the east of Mount Reid than any extension of the Zeehan line.

156. *By Mr. Butler.*—Do you think that the price of copper is likely to fall much below its present value? I took some trouble to obtain information in regard to the matter, and I find that the price of copper can be more safely reckoned upon than that of other metals, because a very large proportion is produced by some 15 large mines. The small mines produce so small a percentage of the total output that the cost of production at them cannot affect the price, which is really ruled by the cost at the few big mines. Should the price of copper fall to £30 a ton most of these mines could not make profits, and would have to shut down. The Mount Lyell mine, in my opinion, would be able to sustain an even greater reduction of price and still be profitable. The Mount Lyell Mine is not quite the same as other mines in regard to the characteristics of the ore. Such mines as the great Anaconda mine, Montana, have an ore consisting of quartz mixed with copper pyrites, which requires crushing and concentration before smelting, while the Mount Lyell ore is ready for smelting without preliminary treatment. The Lake Superior copper mines have an ore containing metallic copper, which requires quite different treatment from that given to sulphide ores. The mine most comparable with the Mount Lyell mine is the Rio Tinto, in Spain, which is profitably worked, but which is not half so rich as the Mount Lyell, the ore only containing  $2\frac{1}{2}$  per cent. of copper, a little silver, and traces of gold.

157. Do you think there is any chance of a trade being opened up in sulphur, provided that the means of communication exist? The sulphur in the Mount Lyell deposit will in time be of much value for the manufacture of sulphuric acid for the production of superphosphates and bone manures. It has been said that a country's industrial importance can be gauged by its consumption of sulphuric acid, this acid being largely used in all sorts of manufactures at one stage or other.

The Committee then adjourned.

## APPENDIX A.

*To the Honorable the Speaker and Members of the House of Assembly of Tasmania, in Parliament assembled.*

The humble Petition of the Mount Lyell Mining and Railway Company, Limited, registered in the Colony of Victoria under Part I of "The Companies Act, 1899," and having its Registered Office at Prell's Buildings, Queen-street, Melbourne, in the Colony of Victoria aforesaid,

SHEWETH :

1. That on the tenth day of April, one thousand eight hundred and ninety-four, previously to the presentation hereof, notice of the intention of your Petitioners to apply for a Private Bill was published in the *Hobart Gazette*, of that date, and in the *Mercury* and *Tasmanian News* of the sixth day of April instant, both being public newspapers published in Hobart, and in the *Zeehan and Dundas Herald* of the seventh day of April instant, being the newspaper published in or nearest to the District affected by the said Bill, which said notice contained a true statement of the general objects of the Bill as hereinafter set forth.

2. Your Petitioners have been unable to comply with the Standing Rules and Orders of this Honorable House in consequence of Parliament having been in Session some time before the necessity arose for obtaining the legislation sought by the said Private Bill, and it would be most detrimental to the interests of the Mount Lyell Mining and Railway Company, Limited, if the said Bill should be postponed until the next Session of Parliament.

3. That the general objects of the said Bill are to authorise the Mount Lyell Mining and Railway Company, Limited, to borrow a sum of One hundred and fifty thousand Pounds for the purpose of constructing a Railway from Mount Lyell to Strahan, upon the security of debentures, redeemable twenty years after date, bearing interest at four per cent. per annum, and guaranteed by the Government of Tasmania.

Your Petitioners therefore pray for leave to introduce the said Bill.

And your Petitioners will ever pray, &c.

Dated this tenth day of April, one thousand eight hundred and ninety-four.

BUTLER, M'INTYRE, & BUTLER,  
*Agents for the Mount Lyell Mining and Railway Company, Limited.*

## APPENDIX B.

*Extracts from Report on the Routes surveyed for the Mount Lyell Railway.*

*The King River Route* is the natural outlet, as its valley, together with that of the tributary the Queen River, leads right up to Mount Lyell; it has the advantage over the other of shortness, less height to rise, long stretches of easy gradients, and, in the absence of a trial survey of the road route, it would appear to be the cheapest.

The valley, bounded by lofty steep mountains, has the appearance of being too rough for a line of railway. Many a railway, however, is located in worse quarters than this, and, as frequently happens, the actual survey shows that the valley is better than it looks. The worst feature of the country is the exceedingly steep side slope of the ground, from which circumstance embankments in many places are impracticable, and one would fear that the hillsides would slip down if cuttings were made in them. It happens, however, that the whole country is rock, and the hardest rock is found at the worst places. This makes railway construction possible and safe, the rock cuttings will stand at very steep slopes, and in the worst places, where it might be dangerous to touch the cliffs and bluffs, the line can pass round them or timber trestles.

I believe the rock cuttings will stand well, and that the surface soil, kept together by the bush, will have no tendency to slip into the cuttings. I have seen railway cuttings like these situated below very steep hillsides where there was continual danger from stones rolling down the hill; here there will be no rock of this kind, as the dense forest will prevent anything falling into the cuttings.

From these considerations I conclude that there is nothing in the valley of the King that would justify me in rejecting the line through it, especially considering the estimated cheapness of this route.

The following is an approximate estimate of the total cost to construct the King Line, with the addition of a sum for sundry extras, which would be common to any line selected to be built:—

	£
Approximate cost of railway, King route.....	108,000
Works at machine site, wharf, sheds, cottages, water supply, coal stores, sidings, &c. ....	9700
Rolling stock.....	10,000
Total.....	<u>£127,700</u>

which is equal to £6810 per mile.

The investigations I have made show that the King line is more economical than the road line by about £7000; that it has greater carrying capacity towards Mount Lyell of about 33 tons per day; it is shorter by one mile; it rises to 100 feet, and has probably less curvature.\*

\* From the above estimate of £9700 for wharves must be deducted the sum of £3500, the estimated cost of a wharf at Pine Cove, which expenditure will be avoided by utilising the Government wharf at Long Bay. This will make Mr. Bell's total estimate of the cost from Lyell to Pine Cove, £124,200; add for extension from Pine Cove to Strahan, £15,000. Total Mr. Bell's estimate, £139,200.

APPENDIX C.

RETURN showing Mineral Lands leased and applied for, which will be served by the construction of the Mount Lyell Railway.

Situation.	Number of Acres.				Annual Rentals.		
					£	s.	d.
Mount Lyell .....	690 acres, at £1 per acre.....				690	0	0
	980 " 5s. " .....				245	0	0
M'Cusick's Creek .....	80 " £1 " .....				80	0	0
	160 " 5s. " .....				40	0	0
Woody Hill .....	153 " £1 " .....				153	0	0
	167 " 5s. " .....				41	15	0
Hall & Harvey's .....	90 " £1 " .....				90	0	0
	15 " £1 " .....				15	0	0
Princess River .....	80 " 5s. " .....				20	0	0
	40 " £1 " .....				40	0	0
Howard's Plains .....	230 " £1 " .....				230	0	0
King River.....	160 " £1 " .....				160	0	0
Mount Huxley .....							
TOTAL.....	2855 acres.			TOTAL .....	£1804	15	0

Town of Gormanston—Approximate value of land sold, £3672.

NOTE.—The construction of this Line will largely facilitate the working of adjacent Mines, and will cause large areas of Mineral land to be taken up and worked.

F. BELSTEAD, Secretary for Mines.

29th May, 1894.

APPENDIX D.

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*Hadley's Orient Hotel, June 1st, 1892.*

SIR,

IN reply to your note as to Dr. Peters, I have to say that he is the author of the best book on modern copper smelting in existence, and is well known to all mining engineers and metallurgists by numerous papers in scientific and technical periodicals. His book and papers always excite much admiration, from the admirable blending in them of practical experience with scientific knowledge. He is looked upon as one of the greatest, if not the very highest authority on the metallurgy of copper now living, and bears a very high reputation amongst mining men both for skill and probity. It was with the greatest pleasure that I heard that his services had been secured to report on the Mount Lyell mine; as the favourable opinion of an authority of such world-wide fame could not fail to be most convincing to capitalists at a distance. From his high reputation we may be quite sure that his estimate of the value of the mine will turn out to be a true one; and that his opinion as to the cost of working it, and the profit to be made, will prove correct.

I have the honour to be,

Sir,

Your obedient Servant,

A. MONTGOMERY, *M.A., Geological Surveyor.*

*The Hon. N. J. BROWN, Parliament House.*

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**As amended in Committee.**

A

**B I L L**

TO

Authorise "The *Mount Lyell* Mining and Railway Company, Limited," to borrow the Sum of £150,000 upon the Security of Debentures carrying Interest guaranteed by the Government of *Tasmania*. A.D. 1894.

**W**HEREAS "The *Mount Lyell* Mining Company, No Liability," registered in the Colony of *Victoria* under the provisions of "The Companies Act, 1890," was authorised by an Act of the Parliament of *Tasmania* whereof the short title is "The *Mount Lyell* and *Strahan* Railway Act, 1892," to construct, maintain, and work the Railway from *Mount Lyell* to *Strahan* which is in the said Act mentioned : PREAMBLE.

And whereas the said Company has, in pursuance and by virtue of the power in that behalf vested in it by the said Act, assigned and transferred all the rights, powers, privileges, concessions, and advantages by the said Act conferred upon it to "The *Mount Lyell* Mining and Railway Company, Limited" :

And whereas "The *Mount Lyell* and *Strahan* Railway Act, 1892," was amended by an Act of the Parliament of *Tasmania* whereof the short title is "The *Mount Lyell* and *Strahan* Railway Act, 1893" :

And whereas it is desirable that "The *Mount Lyell* Mining and Railway Company, Limited," should be enabled, in the manner hereinafter appearing, to borrow and raise the sum of £150,000 for the purpose of constructing the said Railway from *Mount Lyell* to *Strahan*, in accordance with the provisions of the two Acts of the Parliament of *Tasmania* hereinbefore mentioned :

[*Private.*]

\* \* The words proposed to be struck out are enclosed in brackets [ ] ; those to be inserted in parentheses ( ).

A.D. 1894.

Be it therefore enacted by His Excellency the Governor of *Tasmania*, by and with the advice and consent of the Legislative Council and House of Assembly, in Parliament assembled, as follows :—

Short title.

**1** This Act may be cited as “The *Mount Lyell* Mining and Railway Company's Debentures Act.” 5

Interpretation.

**2** In this Act the following words and expressions, unless the context otherwise determines, shall have the meanings hereinafter respectively assigned to them ; that is to say—

“The said Company” shall mean “The *Mount Lyell* Mining and Railway Company, Limited,” which is registered by that 10 name in the Colony of *Victoria* under “The Companies Act, 1890 :”

“The said Acts” shall mean “The *Mount Lyell* and *Strahan* Railway Act, 1892,” and “The *Mount Lyell* and *Strahan* Railway Act, 1893 :” 15

“The said Railway” shall mean the Railway from *Mount Lyell* to *Strahan* which “The *Mount Lyell* Mining Company, No Liability,” is by “The *Mount Lyell* and *Strahan* Railway Act, 1892,” and by “The *Mount Lyell* and *Strahan* Railway Act, 1893,” authorised to construct : 20



“The Debentures” or “the said Debentures” shall mean the Debentures which the said Company is by this Act authorised to issue in the manner hereinafter mentioned :

“The Governor” shall mean the Governor of the Colony of *Tasmania* for the time being : 25


“The Treasurer” shall mean the Treasurer of the Colony of *Tasmania* for the time being :

“The Auditor-General” shall mean the Auditor-General of the Colony of *Tasmania* for the time being.

Company may borrow and raise a sum not exceeding £150,000 upon the security of Debentures issued under the authority of this Act.

 \* (more) 


**3** It shall be lawful for the said Company, for the purpose of constructing the Railway from *Mount Lyell* to *Strahan* which the said Company is by the said Acts authorised to construct, maintain, and work, to raise and borrow any sum or sums of money not exceeding in the whole the sum of £150,000 upon Debentures, to be issued by the Company under the authority of this Act, which shall secure the re- 35 payment by the Company of the sums so borrowed at a period of not [less]\* than Twenty [nor more than Thirty] years after the date of the issue of such Debentures with Interest thereon in the meantime at the rate of not more than Four Pounds per centum per annum, payable at intervals not exceeding One year, (and the Company, in issuing the 40 said Debentures, shall reserve to itself the power to pay off all or any portion of the said Debentures upon giving to the holders thereof such notice as may be agreed upon by the Treasurer and the Company.)

Governor in Council may guarantee payment of Interest upon moneys secured by Debentures. 


**4** In order to facilitate the raising and borrowing of such moneys as aforesaid upon the security of such Debentures as aforesaid, it shall be 45 lawful for the Governor in Council, subject to the provisions hereinafter contained, and after the sum of £25,000 has been deposited by the said Company with the Treasurer, to guarantee the payment of the Interest secured by such Debentures, and the Governor [in Council]

shall at the request of the Company guarantee the payment of such Interest as aforesaid ; and such guarantee shall be given by endorsing on each such Debenture the words "The Interest payable upon the sum secured by this Debenture is guaranteed in pursuance of the *Mount Lyell* Mining and Railway Company's Debentures Act," and by the Governor signing such endorsement. But such guarantee shall not be operative until all moneys to arise from the sale and disposal of such Debentures as aforesaid shall be deposited in a Bank in *Tasmania* as hereinafter provided. A.D. 1894.


10 5 All moneys to arise from the sale and disposal of the said Debentures shall be deposited in a Bank in *Tasmania* appointed by the Governor in Council and to the credit of an Account to be opened by the said Company at such Bank, entitled "The *Mount Lyell* and *Strahan* Railway Account"; and the said moneys shall be expended  
15 upon the construction of the said Railway ; and no money shall be drawn out of the said Account except by cheque or other order or document countersigned by the Treasurer of *Tasmania*. Moneys to be deposited in a Bank in *Tasmania*.

(5A The balance of the said moneys to be raised by the sale or disposal of the said Debentures after the payment of the cost of  
20 constructing the said Railway, together with all Interest that may accrue upon the said moneys, shall be retained in the said Account so long as any Interest guaranteed under the authority of this Act is payable.) 

25 6 The said Company shall, as far as practicable, employ in the construction of the said Railway such artificers, labourers, and other workmen as can be engaged for that purpose in *Tasmania*, and shall, as far as practicable, use for the purpose of constructing the said Railway timber and other materials indigenous to *Tasmania*. Company to employ labour, &c. obtainable in *Tasmania*.

(6A In consideration of the Governor guaranteeing the payment of  
30 such interest as aforesaid the Company shall construct the said Railway to *Long Bay*.) 

7 So long as any Interest guaranteed under the authority of this Act is payable in respect of the said Debentures or any of them, the said Company shall, on the First day of *January*, the First day of  
35 *April*, the First day of *July*, and the First day of *October* in every year, pay to the Treasurer, out of any profits made by the said Company by the working of the said Railway, or by any mining operations carried on by the said Company in *Tasmania*, a sum equal to One Pound per centum of the sum borrowed by the said Company upon the  
40 security of the said Debentures, to be applied by the Treasurer to the payment of the Interest accruing due in each year upon the said sum so borrowed by the said Company as aforesaid. Company to pay Interest on Debentures to the Treasurer out of profits.

(7A So long as any Interest guaranteed under the authority of this Act remains payable it shall not be lawful for the Company to pay  
45 any dividend or to divide any profits made by the Company amongst the Shareholders thereof until the Treasurer has received from the Company a sufficient sum to provide for the payment of the half-year's Interest then current.) 


A.D. 1894.

Interest on  
Debentures to be  
paid by the  
Treasurer.


If Company fails  
to pay moneys to  
the Treasurer,  
application may  
be made to the  
Supreme Court  
for authority to  
issue execution.


**8** The Interest guaranteed under the authority of this Act shall be paid from time to time by the Treasurer to the persons entitled to receive the same out of the moneys received by him from time to time from the said Company for that purpose.

**9** If the Company shall at any time fail or refuse or neglect to pay out of any such profits as aforesaid, or to otherwise provide the moneys which the Company is hereinbefore required to pay from time to time to the Treasurer for the purposes of this Act, it shall be lawful for the Treasurer to apply to the Supreme Court, or to any Judge of the said Court, for a Decree or an Order authorising the Treasurer to sign Judgment for the sum payable by the said Company to the Treasurer, and to issue execution forthwith against the said Company in respect of all property of the said Company in *Tasmania* for the purpose of recovering and obtaining payment of the sum payable by the said Company to the Treasurer as aforesaid, and the Court or Judge, upon being satisfied that such sum is due and payable by the said Company to the Treasurer under the provisions of this Act, shall make such Decree or Order as aforesaid.


 **(9A)** Subject to the proviso contained in Section Ten **A**, the sum of Twenty-five thousand Pounds to be deposited by the Company with the Treasurer as aforesaid, together with all Interest which may accrue thereon, shall remain in the hands of and under the control of the Treasurer so long as any Interest remains guaranteed by the Governor under the provisions of this Act.)

Treasurer may  
apply moneys  
deposited with  
him by Company  
in payment of  
Interest.

 **10** [Notwithstanding anything hereinbefore contained,] (In addition to any other rights and remedies conferred upon the Treasurer by this Act) whenever the said Company shall fail, or refuse or neglect to pay to the Treasurer in accordance with the provisions of this Act a sufficient sum of money to provide for the payment of any Interest due upon any Debenture issued under the authority of this Act, it shall be lawful for the Treasurer to apply in payment of such Interest so much of the [moneys] (said sum of £25,000) deposited with him by the said Company under the provisions of this Act (and any interest which may accrue thereon) as shall be sufficient for that purpose. 35


 **(10A)** If at any time the Treasurer shall so apply any portion of the said sum of £25,000 or of Interest thereon in payment of such guaranteed Interest as aforesaid, the said Company shall within Six months pay to the Treasurer out of any profits made by the said Company by the working of the said Railway, or by any mining operations carried on by the said Company in *Tasmania*, a sum equal to the amount so applied by the Treasurer in payment of such Interest as aforesaid.)

If Company fails  
to pay Interest, the  
same shall be paid  
by the Treasurer  
out of the  
General Revenue  
of the Colony.


 **11** If at any time after the whole of the moneys deposited with the Treasurer by the Company as hereinbefore provided shall have been applied by the Treasurer in payment of Interest on the said Debentures in accordance with the provisions in that behalf hereinbefore contained, the Company shall fail to provide sufficient moneys in the manner hereinbefore mentioned for the purpose of paying any Interest guaranteed under the authority of this Act, or shall fail to pay on demand any such Interest, then and in every case the Treasurer shall, out of the [General] (Consolidated) Revenue of this Colony, pay on demand all Interest which may be so due and unpaid. 50

- 12** Whenever any sum of money is paid by the Treasurer out of the [General] (Consolidated) Revenue of the Colony for Interest upon the sum secured by any Debenture so guaranteed as aforesaid, then, and in every such case, the amount so paid (together with Interest thereon at the rate of 5 per cent. per annum) shall become and be a primary charge upon the said Railway and the Rolling Stock thereof (and all other property of the said Company in *Tasmania*), and such charge shall be enforceable upon the Petition of the Treasurer by Decree or Order of the Supreme Court vesting the said Railway and the Rolling Stock thereof and all powers, rights, privileges, and easements conferred upon the said Company by the said Act (and all other property of the Company in *Tasmania*) in the Governor for the use of Her Majesty, subject to redemption by the said Company or by the holders of any Debentures issued under the authority of this Act within such time and upon such conditions as the Supreme Court shall determine.
- 13** The said Railway shall not, nor shall the Rolling Stock thereon, be taken in execution by any other Creditor of the said Company during the continuance of the said guarantee.
- 14** So long as any Interest guaranteed under the authority of this Act shall be payable in respect of the said Debentures or any of them, the Company shall furnish to the Governor at the close of each Quarter (viz., on the Thirty-first day of *March*, the Thirtieth day of *June*, the Thirtieth day of *September*, and the Thirty-first day of *December* in each year) an Abstract of their receipts and expenditure for the preceding quarter, so far as the same can be made up in the Colony; and any Accounts not adjusted by the Company in any one Quarter shall be brought into account in the succeeding Quarter, or as soon as the same can be adjusted in the Colony.
- 15** So long as any Interest guaranteed under the authority of this Act is payable in respect of the said Debentures or any of them, the said Company shall submit their Accounts to be audited by the Auditor-General, who is hereby authorised to exercise the same powers with reference to the audit of the said Accounts that he now has and exercises in auditing any Account of the Expenditure of the [General] (Consolidated) Revenue.
- (15A)** The Accounts of the Company in and about the construction of the said Railway shall be submitted to the Auditor-General, who shall certify that the same are properly chargeable to the cost of constructing the said Railway.)
- 16** The Company shall provide satisfactory vouchers or other evidence of all payments made by them when required so to do by the Governor or whom he may appoint.
- 17** So long as any Interest guaranteed under the authority of this Act shall be payable in respect of the said Debentures or any of them, the Governor may appoint some person or persons with full power to enter upon the offices and stations of the Company, and to examine and audit all books and Accounts of the Company, so as to check any such Abstract as hereinbefore mentioned, and the Company shall furnish every facility for the purpose of verifying any such Abstract.

A.D. 1894.



All moneys secured by the Debentures and paid by the Treasurer to be a primary charge on the Railway.




Railway not to be taken in execution.

Company to furnish quarterly Accounts.

The Company's Accounts to be submitted to the Auditor-General.




Company to provide vouchers.

Power to enter and inspect.

[Private.]

A.D. 1894.

Costs and charges  
to be borne by  
the Company.

Interest to  
remain guaranteed  
notwithstanding  
sale of Railway.

**18** All costs and charges arising from carrying out the provisions of this Act (including the cost of the issue and sale of the said Debentures) shall be borne and paid by the Company on demand.

**19** The Interest payable upon any Debenture issued under the authority of this Act shall continue to be guaranteed under this Act notwithstanding the transfer and sale of the said Railway by the said Company to any other Company. 5

Railway to  
continue subject  
to Act notwith-  
standing sale.

**20** The said Railway (and the mining property of the said Company) shall continue subject to the provisions of this Act so long as any of the said Debentures remain outstanding and undischarged, notwithstanding the sale and transfer of the said Railway (or the mining property of the said Company.) 10

Guarantee to  
cease upon  
maturity of De-  
bentures.

**21** The guarantee which the Governor is hereby authorised to endorse upon the said Debentures shall cease and become void upon the expiry of the period for which such Debentures shall be issued, and shall not attach to any renewal of the said Debentures or any of them. 15

Governor not to  
incur personal  
liability.

**22** The Governor shall not incur any personal liability by reason of his signature to the guarantee endorsed upon any of the said Debentures, or by reason of anything done by him in pursuance of this Act.

Moneys deposited  
by Company to be  
repaid after  
Interest has been  
paid.

**23** After all the Interest payable upon the Debentures issued under the authority of this Act and which has been guaranteed as hereinbefore provided shall have been paid by the said Company, the Treasurer shall repay to the said Company all moneys deposited with him under the provisions of this Act and which have not been applied by him for any purpose authorised by this Act. 20 25